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## MONTHLY REVIEW OF WORLD PREVALENCE OF COMMUNICABLE DISEASES<sup>1</sup>

United States, January 1-February 11, 1928

Health conditions during the first five weeks of 1928 were exceptionally favorable. The mortality in 66 large cities during these weeks was 13.7 per 1,000 population (annual basis), as against 14 in the corresponding weeks of 1927, which was also an unusually good health year. Not since 1921 has the January mortality in large cities—and conditions in these cities may be considered a fair index of conditions in the country as a whole—been as low as in the current year. The seasonal maximum occurs, as a rule, toward the end of February or in March, so that although the present outlook would seem to indicate a generally healthful winter, there may be some increase in mortality in the next few weeks.

*Influenza.*—Influenza had shown only a normal seasonal increase in most parts of the country up to the end of January. Cases of this disease, which is not very well reported, were even less numerous than in January, 1927, except in a few Southern States. The total number of deaths from influenza and pneumonia, which are a better index of the prevalence of any serious respiratory affection, but which are available for less recent date than the reported cases, gave approximately the same mortality rate for 95 cities during December and the first three weeks of January as a year ago. For the cities in the northern and western sections the average mortality from these causes in the first three weeks of the year was about the same as or lower than a year ago, but in the South Atlantic, East South Central, and, especially, in West South Central States the average mortality in the cities was somewhat higher. There was no indication, however, of any epidemic of respiratory diseases.

*Smallpox.*—Smallpox has been somewhat more prevalent in recent weeks than in the corresponding weeks of the preceding two years.

<sup>1</sup> From the Office of Statistical Investigations, United States Public Health Service.

There is no indication that any of the outbreaks have been virulent in type. The cases reported by 42 States were as follows:

Week ended 1—	Corresponding week of—		
	1926	1927	1928
Jan. 7.....	610	781	815
Jan. 14.....	894	853	1,274
Jan. 21.....	977	808	1,151
Jan. 28.....	846	953	1,125
Feb. 4.....	1,021	1,017	1,238
Feb. 11.....	1,081	839	1,088

<sup>1</sup> Dates are for the year 1928.

The increase in smallpox cases has occurred chiefly in the West Central and Mountain States, particularly in Kansas, Iowa, and Oklahoma. Marked improvement in the smallpox situation is indicated for most Southern States. In Georgia no cases had been reported in the first five weeks of the current year, as against 385 in January, 1927; in Florida 22 cases had been reported in the same period, as compared with 169 in January a year ago; in Alabama 25 cases had been reported, as compared with 241. In North Carolina smallpox has been prevalent for several years, and in the current year the number of cases has increased markedly; 590 cases were reported in the first five weeks, as against 276 in January, 1927, and 156 in January, 1926. An unusual outbreak of smallpox in Connecticut is indicated; 120 cases were reported up to February 4, although the State has been practically free from this disease for several years.

*Scarlet fever.*—Scarlet fever has shown only the normal seasonal increase in incidence. Up to February 4 there had been fewer cases reported than during the corresponding season one year ago, and approximately the same as the number reported two years ago. The decline as compared with last winter is very general, only three States having reported more cases than in the same period a year ago. The States reporting more cases in the present year are Nebraska, Iowa, and Rhode Island, but in none of them has there been any unusual epidemic prevalence. The seasonal maximum usually is not passed until the end of February or early in March, but there is nothing to indicate that any marked increase should be expected in the present year.

*Diphtheria.*—The number of diphtheria cases reported during January by 41 States corresponded very closely with the number reported in the same month a year ago; in both years the January incidence was slightly higher than in January, 1926. In most States the number of cases reported in the early weeks of the current year did not differ significantly from the number reported last year. States

showing a somewhat higher incidence in the present year include Connecticut, District of Columbia, Illinois, Kansas, Louisiana, New Jersey, New York, Pennsylvania, and Texas.

*Measles.*—Measles cases increased rapidly during January; 41 States, including the District of Columbia, reported 6,674 cases in the week ended January 7, but these same States reported 12,730 cases in the week ended February 4. The incidence in the present year has been slightly above that a year ago, but about the same as that of two years ago. This disease is epidemic every second or third year in most localities and, therefore, over the country at large in any year it may be expected to be epidemic in a certain number of States. The seasonal maximum probably will not be reached until late in the spring; present indications are that it will be more epidemic in the current year than last year, but it is too early to tell whether or not the incidence will be as high as in 1926.

*Poliomyelitis.*—New cases of poliomyelitis reported during January and the early part of February continued above the level of reported cases for the corresponding period of the preceding two years, but the number was gradually declining. The largest number of cases was reported in California (17 cases in the week ended February 4); other States reported only sporadic cases.

*Typhoid fever.*—Typhoid fever was more prevalent than a year ago in the South and Central States and less prevalent in other sections of the country, but the incidence is low at this season of the year.

#### Foreign Countries<sup>2</sup>

The mortality rates in a large number of European towns showed only a slight seasonal increase in November and December. There was no indication that the mortality was disturbed by any serious epidemic situation. In a few cities for which data for December were complete the increase was marked but not unusual. For example, in 16 Scottish towns the death rate in the four weeks ended December 31 was 18.6 per 1,000 (annual basis), as against 14.7 in the preceding four weeks; in Dublin, the death rate was 18.1, as compared with 14.6 in the preceding four weeks; the average death rate in 107 English towns for four weeks in December was 14.1, as against 11.3 in the preceding four weeks.

The following information on the prevalence of specific diseases has been taken from the League of Nations' Monthly Epidemiological Report.

*Cholera.*—The cholera epidemic in Iraq came to an end in December, after lasting five months. During this period 1,479 cases and 1,063 deaths were reported. In the previous epidemic in 1923 there

<sup>2</sup> Data from Monthly Epidemiological Report of the Health Section of the League of Nations' Secretariat, Jan. 15, 1928, supplemented by information published in the Public Health Reports.

were 1,640 cases and 1,097 deaths. More cases occurred in the districts along the Euphrates River in the recent epidemic than in 1923, but the incidence in Basrah and Abadan was much lower, and the city of Baghdad had almost complete immunity in 1927, with only 7 cases reported.

In India cholera was abnormally prevalent in November for the time of year. The disease was particularly epidemic in Bengal and increased also in Assam, Bihar, and Orissa, and in Madras Presidency. The number of deaths reported in the various provinces is shown in the accompanying table. The serious epidemics in Bombay Presidency, Hyderabad, and the Central Provinces, which reached their maximum in August and September, had nearly come to an end in November.

In French Indo-China cholera cases have decreased rapidly since July. In Tonkin, only 3 cases occurred in the last quarter of 1927. Laos was free from cholera from November 10 to the end of December. In December, Annam reported 18 cases, Cambodia 72 cases, and Cochin-China 113 cases.

Cholera infection in ports of the Far East had decreased very markedly at the close of 1927. In the first two weeks of January, 1928, Calcutta reported 43 deaths, Bangkok (16 cases), Singapore 5 cases, Saigon 3 cases, and Rangoon and Moulmein each reported 1 case.

*Cholera deaths reported in the Provinces of India from August 14 to December 3, 1926 and 1927*

Province	1926				1927			
	Aug. 15 to Sept. 10	Sept. 10 to Oct. 9	Oct. 10 to Nov. 6	Nov. 7 to Dec. 4	Aug. 14 to Sept. 10	Sept. 11 to Oct. 8	Oct. 9 to Nov. 5	Nov. 6 to Dec. 3
Punjab and Delhi.....	36	21	0		641	184	2	0
Punjab States.....	0	1	0	0	46	172	45	10
United Provinces.....	430	263	372	164	865	382	100	36
Bihar and Orissa.....	3,154	1,093	572	497	3,519	1,388	905	1,586
Bengal.....	424	511	913	2,294	1,202	2,234	5,506	8,821
Assam.....	25	15	0	17	587	601	1,215	1,615
Central India Agency.....	0	1	0	0	920	92	17	0
Central Provinces.....	603	621	573	88	4,582	2,782	864	304
Madras Presidency.....	980	866	678	1,139	2,323	1,136	1,061	2,599
Hyderabad.....	19	6	0	0	3,089	1,274	579	151
Bombay Presidency.....	1	0	1	26	3,220	945	518	87
States in Bombay Presidency.....	1	0	0	0	60	107	22	0
Burma.....	332	209	162	325	181	195	264	480
Other Indian States.....	5	63	0	0	31	7	16	65
Total.....	6,001	3,670	3,271	4,550	21,475	11,499	11,294	15,954

*Plague.*—The plague incidence in Egypt in 1927 was the lowest on record since the introduction of plague into Egypt in 1899; a total of 79 cases was reported. Twelve cases which occurred at Alexandria between the middle of November and the end of December were the only cases reported in 1927 after September 4.



No case of plague had been reported in Tunis since last July, and none in Algeria since November 17. Greece reported two cases on the island of Mytilene early in December and one case at Piræus on January 3.

Three plague cases occurred at Las Palmas, in the Canary Islands, on December 15. Early in January there were two further cases, and a third case on January 15. One case was reported at Santa Cruz de Teneriffe on January 12.

No plague case has been reported in Senegal since the first week in December. This is the usual quiescent period for plague in Senegal, which lasts until March. In Nigeria the plague situation is much more favorable than it was in the three preceding years. Seventeen cases were reported at Lagos and 3 at Ijebu during the four weeks ended December 31; 67 cases were reported in these two localities in December, 1926. There were 7 cases at Lagos during the first two weeks of January, 1928.

There seems to be a halt in the annual increase of plague in Madagascar, which has been continuous since the introduction of the disease in 1921. The monthly number of cases reported has been lower than in the corresponding month of the preceding year for each month since August, 1927. During the month ended December 15, 1927, there were 243 cases, as compared with 314 during the corresponding period of the preceding year. The maximum prevalence usually occurs between December and February.

Plague was more prevalent in Uganda in 1927 than in any year since 1921; 1,704 deaths from plague were reported from the beginning of the year up to November 26. During the previous five years the reported annual plague mortality has ranged between 535 (in 1924) and 1,608 (in 1926). The maximum prevalence occurred in August. Plague has diminished in Kenya since 1925.

The plague outlook in India remained favorable in November. Returns for the Punjab are very low in comparison with previous years. In Bihar and Orissa, which was practically free from plague from June to the end of October, 51 cases were reported during four weeks ended December 3. The incidence of plague was likewise lower than in previous years in the United Provinces up to the middle of November, since which time there has been an increase which is somewhat rapid for the season. There was as usual an increased prevalence of plague in November in the State of Hyderabad and in the Central Provinces. The normal seasonal maxima of plague in the Bombay and Madras Presidencies (excluding the city of Bombay) as well as in Mysore are passed. Plague was rapidly decreasing in the Madras Presidency during the second half of November, except in the district of Madura, in the extreme south,

where the disease is markedly more prevalent than in the three preceding years.

Bubonic plague appeared in Aden on January 9, 1928, on which day 19 cases were reported. Since the outbreak of 1917, indigenous plague had not been reported from Aden until the present outbreak.

*Yellow fever.*—The yellow-fever situation on the Guinea coast has considerably improved. Only 6 cases were reported at Dakar in December; Senegal was free. The last case occurred during the week ended December 27, and Dakar, as well as Senegal, was declared free from yellow fever on January 6, 1928.

No case of yellow fever has been reported in the Gold Coast Colony since October. The number of cases reported during the year has been considerably higher, however, than during any year since the reappearance of yellow fever in this area. There was 1 case of yellow fever during the last week of December at Abidjan on the Ivory Coast, where the disease had not been reported since August. No case has been reported in Dahomey since November 21, nor in Nigeria since September.

An outbreak of yellow fever occurred at Matadi, in the Belgian Congo, during the week ended December 23; 3 cases (2 fatal) were reported. An additional fatal case occurred on a steamer at Boma. A few suspected cases have also been isolated.

*Smallpox.*—Smallpox has been less prevalent in England and Wales than it was last winter. During the four weeks ended January 7, 1928, there were 989 cases, as compared with 1,371 cases during the corresponding period of the preceding year. There was, however, a marked increase in the number of cases during the second week of January 1928, when 398 cases were reported. There appears also to have been some spread of the disease, as cases were reported in 17 counties during that week. The large majority occurred, however, in Durham and Yorkshire in the north and in Monmouthshire and Glamorganshire in South Wales.

In Spain, where the incidence had been much lower than in previous years, a new increase occurred in the autumn; 18 deaths were attributed to smallpox in September and 34 in October, as compared with only 3 during each of the corresponding months of the preceding year.

The serious epidemic in Algeria began to decrease in December. Only 9 cases were reported during the first week of January, 1928—all in the department of Oran. The total number of cases reported in Algeria in 1927 was 4,305, as compared with 2,473 in 1926, 1,747 in 1925, 483 in 1924, and 141 in 1923. Smallpox incidence, on the contrary, was comparatively low in December in both Tunis and Egypt. It spread in Morocco, where the number of cases increased from 51 in September to 401 in December.

The incidence of smallpox in India increased as usual in November, but was lower than in the preceding year; 1,556 cases were reported during the week ended December 3, as compared with 2,423 during the corresponding week of 1926.

*Enteric fever.*—Enteric fever was more prevalent in England and Wales in 1927 than in either 1925 or 1926; and the seasonal maximum was not reached until the latter part of November, which is unusually late. In 1925 the maximum occurred in August, and in 1926 it occurred in September.

The maximum incidence occurred earlier in 1927 than in 1926 in France, Italy, Hungary, and in the Kingdom of the Serbs, Croats, and Slovenes. In Italy the incidence in September was much in excess of that of the preceding years, but in October the cases were fewer than in the corresponding month of 1926.

In Poland, Czechoslovakia, and Belgium the incidence of enteric fever was higher in September, October, and November of 1927 than it had been in the corresponding period of 1926.

Enteric fever was considerably more prevalent in Egypt during the late summer months than it had been in 1925 or 1926.

In Japan the number of cases of enteric fever reported in the latter half of 1927 was slightly higher than in the same period of 1926, but in the first quarter of 1927 the cases were much fewer.

*Influenza.*—No indication of the approach of any serious influenza epidemic in European countries was noted in either the notifiable disease reports or the mortality statistics for large towns which had been received by the health section of the League of Nations up to the middle of January.

The number of deaths attributed to influenza in large towns of England and Wales increased gradually from the beginning of December, but the increase was slow and there were none of those sudden jumps which usually announce the onset of an epidemic. The influenza deaths in 107 towns increased from 63 during the week ended December 3 to 155 during the week ended January 7.

The seasonal increase, in December, of deaths attributed to influenza in 49 large towns of Germany was also very slow—189 deaths during the four weeks ended December 31 as compared with 116 deaths during the preceding four weeks.

Deaths from influenza in towns of Scotland and northern Ireland were more numerous during December and the first half of January than last winter. In 16 Scottish towns 63 deaths were attributed to influenza during the four weeks ended January 14, 1928, as compared with 47 deaths during the corresponding period of last year.

In nine towns of northern Ireland there were 31 deaths from influenza during these four weeks, as compared with 18 deaths during the corresponding period of 1926-27.

Nine deaths from influenza were reported in 11 towns of the Irish Free State during the four weeks ended January 14, 1928, the same number as reported during the corresponding period of the preceding winter.

There was practically no increase from November to December in influenza cases notified in Denmark or Finland.

In France information is available for the cities of Paris and Lyons. In Paris 23 deaths from influenza were reported in December, as compared with 332 deaths during the corresponding month of 1926. At Lyons there were 7 deaths from influenza in December, as compared with 19 in December, 1926.

Statistics for various other large towns show no high prevalence of influenza during the first week of January.

*Encephalitis lethargica*.—No noteworthy outbreak of this disease was reported in December. The number of cases reported in England and Wales increased from 106 during the four weeks ended December 3 to 134 during the four weeks ended December 31, but both returns were lower than the corresponding figures for the preceding three years. Since the maximum was passed in 1924 there has been a steady decrease of the annual number of cases of encephalitis lethargica in England and Wales and in Scotland. The decrease has been continuous in Sweden and in Switzerland since 1923. The highest annual total was reported in Switzerland in 1920 and in Sweden in 1921.

*Cases of encephalitis lethargica reported in various European countries, 1923-1927*

Country	1923	1924	1925	1926	1927
England and Wales.....	1,025	5,089	2,635	2,267	1,617
Scotland (towns).....		631	206	194	130
Denmark.....	87	107	160	70	116
Sweden.....	536	301	198	153	129
Netherlands.....		35	120	85	101
Switzerland.....	203	87	71	36	22
Italy.....	255	617	681	450	<sup>1</sup> 246
Czechoslovakia.....	366	97	189	54	<sup>2</sup> 68
U. S. S. R.....	920	1,990	2,093	2,272	<sup>3</sup> 1,045

<sup>1</sup> 10 months.

<sup>2</sup> 11 months.

<sup>3</sup> 9 months.

*Poliomyelitis*.—The poliomyelitis outbreaks that occurred in Europe during the autumn of 1927 have decreased rapidly during the last two months. In Germany, where a weekly maximum of 240 cases had been reached in September, there was an average of 20 cases a week during the last three weeks of 1927. The total number of cases reported during the year was 2,742, and the number of deaths attributed to poliomyelitis was 296, as compared with 1,614 cases and 171 deaths during the preceding year and 386 cases in 1925.

In Austria 145 cases were reported in 1927, in comparison with 36 cases the preceding year.



The total number of cases reported was lower in 1927 than in 1926 in England and Wales, in France, and in Denmark. In Sweden the number of cases reported in 1927 was slightly higher than in 1926, but much lower than in the preceding two years.

The incidence was above normal also in Canada, where 309 cases were reported in November and 164 in October, as compared with 26 and 35, respectively, during the corresponding month of the preceding year.

*Diphtheria.*—Diphtheria was more prevalent everywhere in Europe during the last quarter of 1927 than during the corresponding period of the two or three preceding years, with the sole exception of the Union of Socialist Soviet Republic, where the high prevalence during the two preceding years has remained about the same. The increase was general in all countries from the far north to the extreme south of Europe, and was noted also in countries of the Mediterranean coast of Africa. It did not occur in the form of sudden epidemics, but consisted in a slow and mostly moderate increase of the incidence, beginning in late summer or in autumn, which reached its maximum in most countries in November.

The prevalence in the fourth quarter of the last three years is shown below for England, Germany, and France.

	England and Wales	Germany	France
Fourth quarter 1925.....	13,771	8,842	2,840
Fourth quarter 1926.....	14,653	8,684	3,708
Fourth quarter 1927.....	18,160	10,646	4,309

*Scarlet fever.*—Scarlet fever, in contrast with diphtheria, shows no general movement common to all European countries. There was a decreased prevalence in the fourth quarter of 1927 in most European countries as compared with the preceding year, but the incidence increased, on the other hand, in England and Wales, Norway, Denmark, Germany, Austria, Italy, the Kingdom of the Serbs, Croats, and Slovenes, and Bulgaria. The increase was considerable in Germany, where 29,934 cases were reported during the fourth quarter of 1927, as compared with 21,816 and 11,793, respectively, during the corresponding periods of 1926 and 1925, and in the Kingdom of the Serbs, Croats, and Slovenes, where the number of cases reported during the fourth quarter of the year increased from 2,917 in 1925 and 1,828 in 1926 to 4,883 in 1927. In most countries the maximum prevalence was reached in October, but in some not until November.

## THE HEALTH RECORD OF UNIVERSITY STUDENTS AS RELATED TO TONSILLECTOMY

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The improvements so frequently seen to follow well-advised tonsillectomy seem to justify the supposition that a significant difference might be demonstrated between groups of persons having, and those not having had the operation. In an attempt at studying that question, the experience of the University of Michigan Health Service has been drawn upon. For several years the department has examined entering students, cared for their subsequent illness, and collected considerable data.

In an effort at evaluation of the tonsillectomy, the records of two classes have been analyzed. Students entering without tonsils have been compared with those entering with tonsils in place. The accompanying tabulations give comparisons on many points for the two groups.

TABLE 1.—*Comparison of health items in men students who have and have not had tonsillectomy in the class of 1926—entrance year, fall of 1922*

Items compared	Tonsil status			
	Tonsils in		Tonsils out	
	Number	Per cent	Number	Per cent
Number of persons studied.....	703	72	275	28
<i>Entrance examination</i>				
Nervousness, fears or dreads (history).....	149	21	58	21
Weight over 140 pounds.....	321	47	128	49
General health:				
Good.....	658	95	262	95
Fair.....	27	3.9	12	4.4
Poor.....	2	.3	0	0
Posture:				
A.....	37	6	14	6
B.....	154	25	71	30
C.....	345	57	124	53
D.....	74	12	26	11
Teeth:				
Good.....	430	63	170	62
Fair.....	223	32	80	32
Carious cases.....	102	16	38	14
Devitalized (1 or more) history.....	321	49	115	45
Nutrition:				
Good.....	440	67	186	72
Fair.....	208	32	68	26
Poor.....	11	1.6	3	1.2
Golter:				
None.....	557	88	230	90
Small.....	66	10	22	8.7
Medium.....	8	1.2	2	.8
Large.....	1			
Varicocele.....	31	4.8	13	5.2
Phimosis.....	16	2.4	4	1.6
Hernia.....	12	1.8	10	4
Hemorrhoids.....	11	1.7	6	2.4
Acne:				
Marked.....	15	2.3	3	1.2
Slight.....	58	9	31	12
Vision under 20/20 ou.....	127	19	59	23
Deviating septum.....	92	14	31	12
Albuminuria.....	15	2.4	8	3.1

TABLE 1.—Comparison of health items in men students who have and have not had tonsillectomy in the class of 1926—entrance year, fall of 1922—Continued

Items compared	Tonsil status			
	Tonsils in		Tonsils out	
	Number	Per cent	Number	Per cent
<i>Entrance examination—Continued</i>				
Health grade:				
A.....	45	6.8	29	11
B.....	444	66.5	173	66
C.....	167	25	54	20
D.....	10	1.5	5	1.9
Cervical adenopathy.....	189	29	16	6
<i>Observed illness (4 years' records)</i>				
No illness record.....	208	30	79	29
Dispensary calls only, 5 and under.....	310	44	114	41
Dispensary calls only, over 5.....	141	20	64	23
Room calls.....	44	6.3	18	6.5
Infirmiry patients.....	59	8.4	23	8.4
Infirmiry days.....	255	36	111	40
<i>Mean percentages<sup>1</sup></i>				
Favorable items.....		96		98
Unfavorable items.....		27		26

<sup>1</sup> The percentages for favorable and unfavorable items above are averaged to give single figures for comparison.

TABLE 2.—Comparison of health items in women students who have and who have not had tonsillectomy in the class of 1926—Entrance year, fall of 1922

Items compared	Tonsil status			
	Tonsils in		Tonsils out	
	Number	Per cent	Number	Per cent
Number of persons studied.....	391	67.5	187	32.5
<i>Entrance examination</i>				
Dysmenorrhea.....	207	55	99	52
Teeth devitalized (history).....	158	46	74	44
Weight over 110 pounds.....	216	66.5	117	72
Nutrition:				
Good.....	317	81	153	83
Fair.....	62	16	29	16
Poor.....	8	2	3	1.6
Goutier:				
None.....	235	69	166	71
Small.....	87	26	35	22
Medium.....	14	4	8	5
Large.....	3	1	2	1.3
<i>Observed illness (4 years' records)</i>				
No illness records.....	126	32	63	35
Dispensary calls only, under 5.....	168	44	78	42
Dispensary calls only, 5 and over.....	60	16	23	12
Room calls.....	33	8	21	11
Infirmiry days, none.....	356	92.5	175	95
Infirmiry days, 1 or more.....	29	7.5	10	5
Health, grade A.....	224	59	101	57
Health, grade D.....	141	37	70	39

TABLE 3.—*Comparison of history items in men students in the class of 1929—Entrance year, fall of 1925*

History items	Tonsil status			
	Tonsils in		Tonsils out	
	Number	Per cent	Number	Per cent
Number of persons studied.....	<sup>1</sup> 986	65	<sup>2</sup> 537	35
Home district (selected):				
Michigan.....	532	64	297	36
New England.....	94	68	20	27
Pacific coast.....	16	67	8	33
South.....	21	64	12	36
Infant feeding:				
Bottle fed.....	109	20	57	23
Nursed.....	439	80	187	77
Milk drinking:				
Little.....	110	13	48	10
Much.....	709	87	412	90
Past illnesses (having had acute respiratory infections—selected):	666	68	406	77

<sup>1</sup> Mean age, nearest birthday, 19.9.<sup>2</sup> Mean age, nearest birthday, 19.4.TABLE 4.—*Examination and observed illness in same group as in Table 3*

Items of examination	Tonsil status			
	Tonsils in		Tonsils out	
	Number	Per cent	Number	Per cent
Mean height.....inches.....	67.7		68	
Mean weight.....pounds.....	140.9		140.1	
Posture:				
A.....	128	13	64	12
B.....	427	44	235	45
C.....	309	31	191	36
D.....	98	10	37	7
<i>Observed illness (1 years' records)</i>				
Acute respiratory infections (diagnoses).....	442	45	335	63
Dispensary patients.....	717	73	423	77
Dispensary and room calls.....	1,017	104	672	125
Infirmary patients.....	73	7.4	32	6
Infirmary days.....		10.5		7.8

## DISCUSSION

There seems to be little if any significant difference in these data relative to the health of students who came to the University of Michigan with or without having had the operation of tonsillectomy. The data given are for the findings at the entrance examination and during subsequent attention to health through the period of university residence. There is a suggestion of advantage to the tonsillectomized group in general appearance of nutrition and general health grade. The most significant differences seem to indicate that those students with their tonsils in have less trouble with acute upper respiratory infections, but they have more cervical adenopathy.



It must be assumed that the tonsillectomies were done on people who were having trouble and were particularly subject to illness. Such being the case, the operations must have enabled that group to overcome the handicap and enjoy health equal to other students.

Case data relative to conditions before and after tonsillectomy in the same persons will probably give the best evaluation of the operation. The need for conservatism in tonsillectomy was recently voiced by Canfield.<sup>1</sup>

## PUBLIC HEALTH ENGINEERING ABSTRACTS

**Indianapolis Reaps Profit in Garbage.** Eugene M. Reid. *The American City*, vol. 37, No. 6, December, 1927, pp. 753-757. (Abstract by J. B. Harrington.)

Under the supervision of E. W. McCullough, consulting engineer, and the board of commissioners, experiments were begun in 1922 to determine a satisfactory method of garbage reduction. The new plant constructed in Indianapolis at a cost of \$460,000 contains modern equipment for extracting all salable products from the refuse.

Details of the collection trailers, McCullough separators, digesting tanks, and screens are given. Tests have shown that 5.43 tons of green garbage produce 1 ton of crude tankage consisting of approximately 14 per cent of coarse rubbish, 34 per cent fine rubbish, and 52 per cent of feed tankage. Approximately 40 pounds of grease per 1 ton of garbage also are obtained. Grease is worth from 5 to 7 cents per pound and fertilizer filler about \$4.50 per ton.

During the three months, June 1 to August 31, the net profit, deducting capital charges, amounted to \$15,195.94.

**Refuse: Its Storage, Collection, and Disposal.** T. Douglas. *The Surveyor*, vol. 72, No. 1860, September 16, 1927, pp. 251-252. (Abstract by C. C. Ruchhoff.)

A variety of articles are used for the storage of refuse in England, but a uniformity in receptacles is desirable. A portable dust bin is recommended as the best possible means of storage for domestic refuse.

The cost of collection varies from \$0.75 to \$3.75 per ton, and there is room for improvement and reduction in cost. The tendency in England has been toward the replacement of horses by automobiles for collection. The absence of alleys and the long carrying distances down terraces and sometimes through dwellings increase time and cost of collection. It was found that two vehicles working in conjunction in districts supplied with portable dust bins have given the most economical service.

The disposal of refuse without offense to nose or eye is a difficult task and requires that the cleansing departments be equipped, organized, and controlled in an efficient manner. Due to the varying character of the refuse, various methods of disposal are employed, each claiming efficiency and economy. The efficiency of a method for a community can be estimated only after a study of the local conditions.

**Odors from Rendering Offal.** Robert D. MacLaurin. *American Journal of Public Health*, vol. 17, No. 10, October, 1927, p. 1026. (Abstract by H. N. Old.)

Brief description is given in this article of the two methods of fat recovery from offal—the wet method, which involves cooking the material with steam under pressure, and the dry method, which consists in cooking in a "melter," in which the protein material is cooked in its own fat.

<sup>1</sup> Annals of Clinical Medicine, vol. IV, No. 12, June, 1926.

The dry method is gradually replacing the wet method; and from the point of view of odors it is simpler, cheaper to operate, and requires less care, the only odor control equipment required being a water condenser to condense the steam and volatile gases from the cooking operation.

It is stated that the principal consideration in control of odors from offal rendering is that of processing the material in a fresh condition, as putrefaction will be found the usual cause of excessive odor in rendering. The question of satisfactory odor control is essentially one of efficient plant management in the use of either the wet or dry system, and the conclusion is reached that the watchword for odorless rendering of offal is "prevention."

**Oyster Storage.** John E. Bacon. *Public Health News*, vol. 13, No. 1, December, 1927, pp. 16-23. (Abstract by Harriet S. Ryan.)

This is a report of the investigation made of the oyster industry at Maurice River, which furnishes employment for about 3,500 men. The prosperity of the industry was threatened by a ruling of the Federal Department of Agriculture which prohibited interstate shipment of oysters stored in waters of less salt content than that in which they were grown. Oysters taken from the south Jersey beds contain quantities of objectionable silt, which is removed by allowing the oysters to cleanse themselves in "storage floats." In order that these floats may be protected from storms and not be a menace to navigation, they are placed near the mouths of rivers or creeks, which, on account of the lower salinity of such waters, results in the incorporation of some additional waters in shellfish. This was a violation of the pure food and drug law, and the problem before the oystermen and the State department of health was to find an uncontaminated storage area sufficiently high in salinity to prevent the oyster from taking on "added water." An investigation was made of the area at the mouth of the Maurice River to determine the effect of storage upon oysters placed in these waters.

A concise account is given of the operations and the results of the investigation, together with illustrative pictures, a map showing location of the floats used in this study, and a table outlining the experiments.

The investigation showed that salt oysters from Delaware Bay can be stored for cleansing purposes in the waters of Greenbank Reach, Maurice River, and removed from the "float" during the first of ebb tide and not contain an excessive amount of "added water." The United States Department of Agriculture now acknowledges the necessity of storage for purposes of cleansing and improving oysters and approves the waters at the mouth of the Maurice River for this purpose, provided the shellfish are removed from the storage float during certain stages of the tide so as to result in the incorporation of the least added water. This period of the tide is between one hour before high water and three hours before ebb tide.

**Use of Returned Sludge Speeds up Water Softening Reactions.** Anon. *Engineering News-Record*, vol. 99, No. 19, November 10, 1927, p. 748. (Abstract by D. E. Kepner.)

According to A. W. Bull, in a paper presented before the Southwestern Water Works Association in October, 1927, laboratory tests at Columbus and Pittsburgh showed that the use of returned sludge hastened water softening reactions considerably.

At Columbus, 19 hours' agitation was required, without the use of returned sludge, to reduce the soap hardness of the water to 66 p. p. m., while the same reduction was accomplished in two hours with the use of 50 cubic centimeters of returned sludge per gallon, and in one hour with 100 cubic centimeters of sludge per gallon, employing 11 grains of lime and 11 grains of soda ash per gallon, and a temperature of 17° C., in each case. The final alkalinity and causticity of the water were not greater when using the sludge than when not using it. Best results were secured with a sludge concentration of 15,000 p. p. m. (about 60 cubic centimeters per gallon).

At Pittsburgh, with water unusually high in  $MgSO_4$ , a sludge concentration of 7,100 p. p. m. produced good results. The water was apparently softened as easily at 0° C. as at 10° C. with the sludge and in both cases better than could have been done at 30° C. without the sludge. A clearer effluent is also claimed to result from the use of returned sludge.

**Emergency Ventilator in Chlorinating Room.** Anon. *Engineering News-Record*, vol. 100, No. 1, January 5, 1928, p. 9. (Abstract by Harriet S. Ryan.)

A temporary arrangement had to be devised for feeding chlorine gas into the city water at Albany, N. Y., until a new pipe line could be constructed. The apparatus is located in a room underneath the sidewalk adjoining the main pumping station. When leaks occur in the gas line, the pumping station attendant notifies the man in charge of the apparatus, who makes the repairs, closes the air-tight door of the chlorinating room, and starts, from a switch in the pumping station, the electrically driven blower, which draws air from near the floor of the chlorinating room and discharges it into the outside atmosphere.

**Progress Report on Gas-Forming Organism in the Akron Water Supply.** C. O. Hostettler. Sixth Annual Report of Ohio Conference on Water Purification, 1926, pp. 85-86. (Abstract by R. E. Thompson.)

Additional data are given on gas-forming organism present in Akron supply which ferments lactose broth only after 24 hours' incubation and on effectiveness of lactose broth containing 0.5 per cent lactose peptone bile for its inhibition. Results show that modified broth does not inhibit *B. coli*, but does inhibit organisms giving rise to fermentation after 24 hours' incubation. Use of modified broth hastens obtaining of results and reduces volume of work.

**Open Reservoirs for Filtered Water on the Distributing System.** Clarence Bahlman. Sixth Annual Report of Ohio Conference on Water Purification, 1926, pp. 86-88. (Abstract by R. E. Thompson.)

Explosive appearance of vigorous positive *B. coli* tests in tap samples in Cincinnati was traced to contamination of open filtered water reservoir by manure carried by wind from near-by shrubbery beds. The organisms were very resistant to chlorine, and dosages which had to be resorted to gave rise to many complaints of taste. It was more than two months after first appearance of contamination until a coli-free water was again obtained.

**Colombian Water Supplies, if Not Pure, Have Many Uses.** David and Muriel Yale. *Water Works Engineering*, vol. 80, No. 25, December 7, 1927, pp. 1740 and 1764. (Abstract by Frank Raab.)

In Colombia, in the Andes Mountains, where the villages are built on the mountain sides, the inhabitants secure their water supplies from streams which are located on a higher elevation than the village. The streams are tapped and the water is brought to the village through ditches along which the dwellings are located. These ditches provide garbage disposal, sewage disposal, and, in a few instances, power for lighting. The socially elect build their houses at the higher elevations and thus get the water at its purest; while the peons, or poorer classes, who live at the lower ends of these ditches, take the water with all the pollution which it has gathered. A ditch also carries the water to a public fountain, which is usually located in the center of the village; the peon, however, usually does not bother to walk to the fountain for his drinking supply, but contents himself in taking it from the polluted ditch as it passes his dwelling. Women wash clothes, and children, dogs, pigs, cattle, and mules wade about in the stream before it reaches even the first dwellings. The inhabitants never think of blaming the water supply for sickness or death, which it no doubt causes in many cases.

**Carbon Dioxide Treatment at St. Louis Water Works.** A. V. Graf. *Engineering News-Record*, vol. 99, No. 16, October 20, 1927, p. 643. (Abstract by A. H. Wieters.)

St. Louis is planning a further refinement in the purification of water by the use of carbon dioxide. Each of the two filter plants will be equipped with carbon dioxide devices consisting of a gas-producing burner, combined washer, scrubber and drier, gas burner, and compressor, or blower.

Softening of the water is limited to partial removal of bicarbonate hardness and only occasionally enough lime is used to render the water caustic. The normal carbonate alkalinity of the settled water varies from 22 to 67 p. p. m., and that of water applied to filters from 2 to 30 p. p. m. This reduction is due to the use of aluminum sulphate as a coagulant. The coating on the filter sand now amounts to 17 per cent of the filtering material, and there have been complaints of clogging of water heaters.

The author states that the use of carbon dioxide is not of as recent origin as most water works men believe. He points out that it was used at Derby, England, in 1892.

**Softening Plant with Unusual Features.** J. F. Laboon. *Water Works Engineering*, vol. 80, No. 25, December 7, 1927, pp. 1731-1732 and 1748-1751. (Abstract by Frank Raab.)

Fostoria, with a population of about 12,000, has an average daily water consumption of 1,400,000 gallons. It is proposed to soften the water by the lime-soda method. The new plant will have a settling basin equipped with a thickener and having a retention period of 2 hours at a 3,000,000-gallon rate, 4 filters each with a 750,000-gallon daily capacity. The filter gravel bed is 18 inches and the sand bed is 30 inches deep; the mixing tank, which also has a stirring equipment to prevent bottom deposits, has a retention period of 30 minutes at a 3,000,000-gallon rate; the clear wells and the clear water basin have a capacity of 645,000 gallons. A centrifugal sump pump to remove drainage and also to remove sludge from the clarifier, is provided. The wash water tank holds 50,000 gallons. There is a carbonating chamber with scrubbers, driers, and compressors, aerating equipment, office, laboratory, and toilet rooms. A belt conveyor carries the sacks of chemicals to the dry-feed machines. The plant has a sand washer, a central operating table with controls of the Venturi meter, the clear wells and wash water basin and also a telemeter gauge of the stand-pipe tower. Each filter has its operating table with loss of head and rate of flow gauges and hydraulically operated valves. The influent wall is perforated to give perfect distribution. The effluent wall is equipped with adjustable baffle weirs. The chlorine room is equipped with two chlorinators and scales. Two points of chlorine application are provided. The estimated cost of the total improvements is \$178,529.

**The Proper Methods Respecting Chlorination of Water Supplies.** J. Van Benschoten. *Public Health Journal* (Canadian Public Health Association), vol. 18, No. 11, November, 1927, pp. 537-542. (Abstract by H. D. Cashmore.)

A brief history up to the present time of the development of chlorination of water and some figures on the reduction of the typhoid death rate in this country are given. The cycle of a water supply is touched on lightly as well as the relation of water to man and certain diseases. There is included a short discussion of the basic types of chlorinators, dry feed and solution feed, including the vacuum type, in regard to their application to different conditions of climate and water supply. Points to be considered in the selection of a machine, with stress laid on the importance of including all details of construction and equipment of the system, are given with a view of aiding this important step. In addition to the discussion in regard to a water supply, there are also included a few brief statements relative to the use of chlorine in sewage disposal operations.



# DEATHS DURING WEEK ENDED FEBRUARY 25, 1928

Summary of information received by telegraph from industrial insurance companies for the week ended February 25, 1928, and corresponding week of 1927. (From the Weekly Health Index, March 1, 1928, issued by the Bureau of the Census, Department of Commerce)

	Week ended Feb. 25, 1928	Corresponding week 1927
Policies in force.....	70, 067, 743	66, 849, 234
Number of death claims.....	13, 321	11, 837
Death claims per 1,000 policies in force, annual rate.....	9. 9	9. 2

Deaths from all causes in certain large cities of the United States during the week ended February 25, 1928, infant mortality, annual death rate, and comparison with corresponding week of 1927. (From the Weekly Health Index, March 1, 1928, issued by the Bureau of the Census, Department of Commerce)

City	Week ended Feb. 25, 1928		Annual death rate per 1,000 corres- ponding week 1927	Deaths under 1 year		Infant mortality rate, week ended Feb. 25, 1928 <sup>1</sup>
	Total deaths	Death rate <sup>2</sup>		Week ended Feb. 25, 1928	Corre- sponding week 1927	
Total (66 cities).....	8, 133	14. 2	13. 9	857	913	71
Akron.....	52			7	4	76
Albany <sup>3</sup> .....	41	17. 8	18. 8	7	7	143
Atlanta.....	86	17. 7	15. 7	10	10	
White.....	43		11. 6	7	3	
Colored.....	43	( <sup>4</sup> )	25. 4	3	7	
Baltimore <sup>4</sup> .....	248	15. 6	16. 0	18	27	57
White.....	177		13. 9	10	16	40
Colored.....	71	( <sup>4</sup> )	28. 1	8	11	125
Birmingham.....	73	17. 2	14. 1	8	9	68
White.....	37		7. 1	4	2	55
Colored.....	36	( <sup>4</sup> )	25. 2	4	7	90
Boston.....	265	17. 3	16. 1	32	26	89
Bridgeport.....	46			13	2	238
Buffalo.....	160	15. 1	13. 7	17	23	73
Cambridge.....	35	14. 5	14. 7	7	4	125
Camden.....	33	12. 7	16. 5	5	5	80
Canton.....	28	12. 5	7. 4	2	1	48
Chicago <sup>4</sup> .....	795	13. 2	12. 9	75	95	64
Cincinnati.....	149	18. 8	18. 3	13	10	79
Cleveland.....	182	9. 4	12. 1	13	27	35
Columbus.....	72	12. 7	16. 8	7	9	65
Dallas.....	50	12. 0	12. 6	10	5	
White.....	33		10. 2	7	4	
Colored.....	17	( <sup>4</sup> )	28. 5	3	1	
Denver.....	100	17. 8	18. 4	15	12	
Des Moines.....	30	10. 3	8. 8	1	5	17
Detroit.....	331	12. 6	13. 2	57	68	88
Duluth.....	20	9. 0	9. 5	3	0	70
El Paso.....	46	20. 4	11. 5	8	5	
Erie.....	27			2	3	41
Fall River <sup>4</sup> .....	25	9. 7	17. 3	5	8	86
Flint.....	23	8. 1	9. 9	4	4	51
Fort Worth.....	34	10. 6	12. 7	6	7	
White.....	24		11. 6	5	7	
Colored.....	10	( <sup>4</sup> )	21. 3	1	0	
Grand Rapids.....	32	10. 2	9. 3	5	2	75
Houston.....	65			7	8	
White.....	47			5	6	
Colored.....	18	( <sup>4</sup> )		2	2	
Indianapolis.....	112	15. 3	14. 9	4	12	30
White.....	94		14. 7	4	11	35
Colored.....	18	( <sup>4</sup> )	16. 3	0	1	0
Jersey City.....	76	12. 2	12. 3	10	6	75

<sup>1</sup> Annual rate per 1,000 population.

<sup>2</sup> Deaths under 1 year per 1,000 births. Cities left blank are not in the registration area for births.

<sup>3</sup> Data for 59 cities.

<sup>4</sup> Deaths for week ended Friday Feb. 24, 1928.

<sup>5</sup> In the cities for which deaths are shown by color, the colored population in 1920 constituted the following percentages of the total population: Atlanta, 31; Baltimore, 15; Birmingham, 39; Dallas, 15; Fort Worth, 14; Houston, 25; Indianapolis, 11; Kansas City, Kans., 14; Knoxville, 15; Memphis, 38; Nashville, 30; New Orleans, 26; Richmond, 32; and Washington, D. C., 25.

## Deaths from all causes in certain large cities of the United States during the week ended February 25, 1928, etc.—Continued

City	Week ended Feb. 25, 1928		Annual death rate per 1,000 corresponding week 1927	Deaths under 1 year		Infant mortality rate, week ended Feb. 25, 1928
	Total deaths	Death rate		Week ended Feb. 25, 1928	Corresponding week 1927	
Kansas City, Kans.	33	14.6	13.3	1	6	21
White	19		13.0	0	5	0
Colored	14	( <sup>1</sup> )	14.8	1	1	145
Kansas City, Mo.	114	15.2	14.3	6	8	42
Knoxville	32	15.9	17.9	5	2	109
White	28		15.1	5	1	121
Colored	4	( <sup>1</sup> )	38.5	0	1	0
Los Angeles	284			13	14	51
Lowell	28	13.3	10.4	4	4	84
Lynn	24	11.9	13.4	5	4	126
Memphis	85	23.6	21.6	6	7	70
White	43		19.0	3	2	56
Colored	42	( <sup>1</sup> )	26.3	3	5	94
Milwaukee	100	9.6	10.8	17	19	76
Minneapolis	106	12.2	11.5	9	10	54
Nashville	58	21.9	15.5	6	5	94
White	41		14.2	3	3	64
Colored	17	( <sup>1</sup> )	18.8	3	2	180
New Bedford	20	12.7	14.4	4	7	87
New Haven	53	14.7	13.0	4	2	56
New Orleans	169	20.6	19.3	17	18	82
White	114		16.6	9	4	65
Colored	55	( <sup>1</sup> )	26.9	8	14	114
New York	1,705	14.8	13.7	201	173	81
Bronx Borough	229	12.6	10.5	27	14	82
Brooklyn Borough	572	13.0	12.4	76	73	76
Manhattan Borough	730	21.8	18.5	76	71	90
Queens Borough	135	8.1	9.6	15	13	72
Richmond Borough	41	14.2	16.4	4	3	72
Newark, N. J.	140	15.5	11.2	22	9	113
Oklahoma City	39			2	6	
Omaha	55	12.9	13.8	2	5	25
Paterson	32	11.5	10.5	2	4	35
Philadelphia	577	14.6	13.8	50	54	67
Pittsburgh	188	14.6	16.6	22	25	72
Portland, Oreg.	89			1	6	11
Providence	57	10.4	10.2	11	5	95
Richmond	61	10.4	12.8	9	5	118
White	33		7.3	4	1	87
Colored	28	( <sup>1</sup> )	26.3	5	4	184
Rochester	78	12.4	12.9	8	7	65
St. Louis	273	16.8	12.9	21	16	70
St. Paul	55	11.4	13.3	4	2	38
Salt Lake City	38	14.4	13.8	5	6	82
San Antonio	86	20.6	17.3	7	12	
San Diego	40	17.5	23.1	1	1	19
San Francisco	155	13.8	13.4	15	12	94
Schenectady	25	14.0	16.8	4	5	125
Seattle	78	10.6	11.1	1	3	10
Somerville	26	13.2	10.8	2	4	60
Spokane	30	14.4	18.2	4	5	103
Springfield, Mass.	31	10.8	11.3	2	5	32
Syracuse	57	15.0	16.9	4	5	49
Toledo	80	13.4	13.7	7	7	67
Trenton	45	16.9	18.7	3	3	51
Utica	42	21.1	21.2	3	4	68
Washington, D. C.	150	14.2	18.1	12	19	68
White	97		12.9	8	5	66
Colored	53	( <sup>1</sup> )	33.3	4	14	74
Waterbury	19			2	2	58
Wilmington, Del.	21	8.5	12.8	1	5	26
Worcester	60	15.9	16.3	2	9	24
Yonkers	37	15.9	12.3	3	5	68
Youngstown	33	9.9	10.2	3	10	40

<sup>1</sup> Deaths for week ended Friday Feb. 24, 1928.<sup>2</sup> In the cities for which deaths are shown by color, the colored population in 1920 constituted the following percentages of the total population: Atlanta, 31; Baltimore, 15; Birmingham, 39; Dallas, 15; Fort Worth, 14; Houston, 25; Indianapolis, 11; Kansas City, Kans., 14; Knoxville, 15; Memphis, 38; Nashville, 30; New Orleans, 26; Richmond, 32; and Washington, D. C., 25.

# PREVALENCE OF DISEASE

*No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring*

## UNITED STATES

### CURRENT WEEKLY STATE REPORTS

These reports are preliminary and the figures are subject to change when later returns are received by the State health officers

#### Reports for Weeks Ended March 5, 1927, and March 3, 1928

*Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended March 5, 1927, and March 3, 1928*

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Mar. 5, 1927	Week ended Mar. 3, 1928	Week ended Mar. 5, 1927	Week ended Mar. 3, 1928	Week ended Mar. 5, 1927	Week ended Mar. 3, 1928	Week ended Mar. 5, 1927	Week ended Mar. 3, 1928
<b>New England States:</b>								
Maine.....	3	6	8	—	158	35	0	0
New Hampshire.....	—	4	—	11	—	33	—	0
Vermont.....	4	—	—	—	37	21	0	0
Massachusetts.....	87	100	23	9	271	1,993	1	1
Rhode Island.....	10	9	—	—	3	29	0	0
Connecticut.....	29	20	7	3	146	358	1	1
<b>Middle Atlantic States:</b>								
New York.....	392	388	1 150	1 40	858	2,108	5	15
New Jersey.....	123	122	36	16	54	774	0	1
Pennsylvania.....	187	310	—	—	1,014	1,864	1	9
<b>East North Central States:</b>								
Ohio.....	—	95	—	41	—	495	—	0
Indiana.....	40	25	27	31	215	190	0	0
Illinois.....	109	151	44	60	2,420	151	4	7
Michigan.....	85	77	—	8	266	1,135	0	6
Wisconsin.....	50	26	46	57	620	89	2	6
<b>West North Central States:</b>								
Minnesota.....	40	13	1	5	283	13	6	0
Iowa.....	20	10	—	—	498	16	1	1
Missouri.....	40	54	—	47	193	184	0	3
North Dakota.....	8	8	—	—	194	7	0	0
South Dakota.....	4	—	17	3	477	39	1	2
Nebraska.....	6	17	27	17	215	8	0	2
Kansas.....	24	17	7	46	737	42	0	0
<b>South Atlantic States:</b>								
Delaware.....	4	2	—	2	10	8	0	0
Maryland.....	60	44	356	51	38	1,012	0	0
District of Columbia.....	36	21	21	—	4	113	0	0
Virginia.....	—	—	—	—	—	—	—	—
West Virginia.....	23	12	86	34	174	87	0	0
North Carolina.....	30	29	—	—	160	3,692	0	1
South Carolina.....	11	19	979	1,028	121	1,237	0	0
Georgia.....	12	13	222	211	162	321	1	2
Florida.....	23	26	10	4	147	11	0	1
<b>East South Central States:</b>								
Kentucky.....	—	2	—	—	—	241	—	0
Tennessee.....	14	8	47	136	221	201	1	2
Alabama.....	62	34	82	247	244	292	0	0
Mississippi.....	4	12	—	—	—	—	—	2
<b>West South Central States:</b>								
Arkansas.....	2	13	51	609	20	626	0	1
Louisiana.....	18	20	17	77	106	247	0	0
Oklahoma.....	36	25	188	235	357	257	5	2
Texas.....	40	36	71	196	146	671	1	2

<sup>1</sup> New York City only.

<sup>2</sup> Week ended Friday.

<sup>3</sup> For week ended February 18, 1928, North Carolina reported 4,257 cases of measles, which should have been included in the table on page 466 of Public Health Reports for Feb. 24, 1928.

<sup>4</sup> Exclusive of Tulsa.

*Cases of certain communicable diseases reported by telegraph by State health officers  
for weeks ended March 5, 1927, and March 3, 1928—Continued*

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Mar. 5, 1927	Week ended Mar. 3, 1928	Week ended Mar. 5, 1927	Week ended Mar. 3, 1928	Week ended Mar. 5, 1927	Week ended Mar. 3, 1928	Week ended Mar. 5, 1927	Week ended Mar. 3, 1928
<b>Mountain States:</b>								
Montana.....	13	13			66	3	6	4
Idaho.....	1	1			62		0	3
Wyoming.....	3		1		44	10	0	1
Colorado.....	8	10		24	362	30	3	12
New Mexico.....	4	4	2	5	48	168	0	0
Arizona.....	7	5	1	2	77	4	0	1
Utah <sup>1</sup> .....	11	6	8	3	209	1	0	1
<b>Pacific States:</b>								
Washington.....	9	8	8	1	198	363	3	5
Oregon.....	10	17	270	33	85	98	3	2
California.....	130	121	101	57	3,748	265	1	6
Division and State	Pollomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Mar. 5, 1927	Week ended Mar. 3, 1928	Week ended Mar. 5, 1927	Week ended Mar. 3, 1928	Week ended Mar. 5, 1927	Week ended Mar. 3, 1928	Week ended Mar. 5, 1927	Week ended Mar. 3, 1928
<b>New England States:</b>								
Maine.....	0	0	25	26	0	0	3	2
New Hampshire.....		1		22		0		0
Vermont.....	0	0	10	2	0	0	3	0
Massachusetts.....	2	6	457	332	0	0	9	2
Rhode Island.....	0	0	23	36	0	0	0	0
Connecticut.....	0	1	96	74	0	3	1	0
<b>Middle Atlantic States:</b>								
New York.....	1	4	1,203	831	10	13	16	26
New Jersey.....	0	0	396	282	0	0	3	1
Pennsylvania.....	0	2	630	785	0	0	20	14
<b>East North Central States:</b>								
Ohio.....		1		423		33		4
Indiana.....	0	0	242	180	171	126	6	1
Illinois.....	1	1	370	393	34	40	6	8
Michigan.....	0	0	364	326	25	22	10	6
Wisconsin.....	1	0	225	204	4	33	5	0
<b>West North Central States:</b>								
Minnesota.....	0	0	282	173	1	4	4	1
Iowa <sup>1</sup> .....	0	0	71	105	5	63	1	1
Missouri.....	2	0	143	109	16	35	2	2
North Dakota.....	0	1	106	52	2	1	0	5
South Dakota.....	1	0	153	26	6	0	2	1
Nebraska.....	0	1	49	134	55	64	2	1
Kansas.....	0	0	188	188	43	49	2	0
<b>South Atlantic States:</b>								
Delaware.....	0	0	41	2	0	0	0	0
Maryland <sup>1</sup> .....	0	2	82	74	0	0	4	4
District of Columbia.....	0	0	20	45	1	0	3	0
Virginia.....		1				0		
West Virginia.....	0	1	53	51	39	9	28	0
North Carolina.....	0	1	21	33	48	119	12	2
South Carolina.....	0	2	8	9	15	7	4	3
Georgia.....	0	0	22	15	87	0	2	4
Florida.....	0	0	10	11	50	12	13	13
<b>East South Central States:</b>								
Kentucky.....		0		51		11		2
Tennessee.....	0	0	46	38	24	34	14	4
Alabama.....	1	0	22	18	40	26	25	14
Mississippi.....	0	2	11	24	12	10	6	4
<b>West South Central States:</b>								
Arkansas.....	0	0	12	19	1	8	3	2
Louisiana.....	0	2	4	8	3	22	4	7
Oklahoma <sup>1</sup> .....	1	1	55	60	59	94	14	3
Texas.....	0	0	57	89	128	92	1	4
<b>Mountain States:</b>								
Montana.....	0	0	144	23	24	15	1	0
Idaho.....	0	1	21	5	0	4	0	1
Wyoming.....	0	0	45	6	0	5	1	0
Colorado.....	0	0	54	158	8	20	2	2
New Mexico.....	0	0	17	35	7	1	1	0
Arizona.....	0	0	10	4	0	67	3	0
Utah <sup>1</sup> .....	0	0	12	4	1	13	0	1
<b>Pacific States:</b>								
Washington.....	0	4	116	49	43	46	4	0
Oregon.....	0	3	73	26	25	55	2	0
California.....	1	8	238	182	12	32	8	7

<sup>1</sup> Week ended Friday.<sup>2</sup> Exclusive of Tulsa.



## Reports for Week Ended February 25, 1928

DISTRICT OF COLUMBIA		NEW HAMPSHIRE	
	Cases		Cases
Diphtheria.....	38	Diphtheria.....	1
Influenza.....	2	Influenza.....	12
Measles.....	54	Measles.....	30
Scarlet fever.....	49	Scarlet fever.....	23
Typhoid fever.....	1		

## SUMMARY OF MONTHLY REPORTS FROM STATES

The following summary of monthly State reports is published weekly and covers only those States from which reports are received during the current week:

State	Cerebro-spinal meningitis	Diphtheria	Influenza	Malaria	Measles	Pellagra	Polio-myelitis	Scarlet fever	Small-pox	Typhoid fever
<i>November, 1927</i>										
Colorado.....	8	129			44		13	308	51	32
<i>December, 1927</i>										
Colorado.....	8	79	2		68		6	285	30	11
<i>January, 1928</i>										
Alabama.....	7	163	1,039	54	866	13	1	73	24	43
Arkansas.....	3	63	866	103	1,097	76	2	129	65	30
Dist. of Columbia.....	2	140	11		38		0	153	0	2
Idaho.....	8	2	1		10		0	126	80	3
Illinois.....	41	761	156	8	234		9	1,515	121	57
Mississippi.....	2	101	9,065	2,069	5,174	355	2	143	132	50
Missouri.....	11	197	47		252		6	401	215	15
Montana.....	17	25	11		6		1	141	135	3
North Carolina.....	1	270			13,760		1	382	501	9
Ohio.....	8	705	131		2,163		14	1,452	98	54
Oklahoma <sup>1</sup> .....	5	155	878	44	464	6	3	100	512	38
Oregon.....	4	48	131		168		22	88	163	13
Pennsylvania.....	11	1,123			3,963	2	7	2,348	0	80
Rhode Island.....	0	95	22		37		0	214	0	5
Tennessee.....	5	91	685	17	2,994	14	4	95	98	37
Washington.....	12	70	3		247		14	299	228	13
Wyoming.....	21	5			19		0	136	30	1

<sup>1</sup> Exclusive of Oklahoma City and Tulsa.

<i>November, 1927</i>		<i>January, 1928—Continued</i>	
	Cases		Cases
Colorado:		Anthrax:	
Chicken pox.....	450	Pennsylvania.....	1
German measles.....	8	Chicken pox:	
Impetigo contagiosa.....	7	Alabama.....	180
Mumps.....	59	Arkansas.....	201
Ophthalmia neonatorum.....	1	Distriet of Columbia.....	137
Whooping cough.....	76	Idaho.....	109
<i>December, 1927</i>		Illinois.....	1,753
Colorado:		Mississippi.....	802
Chicken pox.....	352	Missouri.....	279
German measles.....	5	Montana.....	76
Impetigo contagiosa.....	4	North Carolina.....	775
Mumps.....	69	Ohio.....	1,746
Paratyphoid fever.....	1	Oklahoma <sup>1</sup> .....	141
Puerperal septicemia.....	1	Oregon.....	298
Whooping cough.....	53	Pennsylvania.....	3,339
<i>January, 1928</i>		Rhode Island.....	48
Actinomycosis:		Tennessee.....	208
Illinois.....	1	Washington.....	374
<sup>1</sup> Exclusive of Oklahoma City and Tulsa.		Wyoming.....	63

## January, 1928—Continued

	Cases
Dengue:	
Alabama.....	2
Mississippi.....	18
Conjunctivitis:	
Idaho.....	4
Montana.....	1
Dysentery:	
Illinois.....	20
Mississippi—	
Amebic.....	43
Bacillary.....	378
Oklahoma <sup>1</sup> .....	14
Tennessee.....	3
German measles:	
Illinois.....	22
Montana.....	3
North Carolina.....	22
Ohio.....	50
Pennsylvania.....	78
Rhode Island.....	1
Washington.....	36
Hookworm disease:	
Arkansas.....	5
Mississippi.....	232
Impetigo contagiosa:	
Oregon.....	11
Washington.....	4
Lead poisoning:	
Illinois.....	10
Ohio.....	16
Lethargic encephalitis:	
Alabama.....	2
Illinois.....	3
Montana.....	1
Ohio.....	6
Pennsylvania.....	10
Mumps:	
Alabama.....	156
Arkansas.....	219
Idaho.....	103
Illinois.....	1,171
Mississippi.....	1,100
Missouri.....	635
Montana.....	3
Ohio.....	1,375
Oklahoma <sup>1</sup> .....	73
Oregon.....	80
Pennsylvania.....	2,932
Rhode Island.....	60
Tennessee.....	114
Washington.....	326
Wyoming.....	9
Ophthalmia neonatorum:	
Arkansas.....	3
Idaho.....	1
Illinois.....	38
Mississippi.....	9
North Carolina.....	1
Ohio.....	109
Oklahoma <sup>1</sup> .....	1
Rhode Island.....	1
Washington.....	4

<sup>1</sup> Exclusive of Oklahoma City and Tulsa.

## January, 1928—Continued

	Cases
Paratyphoid fever:	
Ohio.....	4
Rhode Island.....	1
Tennessee.....	1
Washington.....	4
Puerperal fever:	
Illinois.....	4
Mississippi.....	35
Ohio.....	6
Pennsylvania.....	8
Tennessee.....	2
Rabies in animals:	
Idaho.....	2
Mississippi.....	6
Missouri.....	5
Oregon.....	2
Rhode Island.....	2
Washington.....	2
Rabies in man:	
Ohio.....	1
Pennsylvania.....	1
Tennessee.....	1
Scabies:	
Oregon.....	12
Washington.....	1
Septic sore throat:	
Idaho.....	2
Illinois.....	10
Missouri.....	27
North Carolina.....	9
Ohio.....	69
Oklahoma <sup>1</sup> .....	20
Oregon.....	12
Tetanus:	
Missouri.....	2
Oklahoma <sup>1</sup> .....	1
Pennsylvania.....	2
Tennessee.....	2
Trachoma:	
Arkansas.....	190
Illinois.....	6
Mississippi.....	36
Ohio.....	7
Oklahoma <sup>1</sup> .....	16
Tennessee.....	6
Tularaemia:	
Alabama.....	1
Illinois.....	2
Montana.....	1
Tennessee.....	11
Typhus fever:	
Alabama.....	1
Undulant fever:	
Pennsylvania.....	1
Vincent's angina:	
Oklahoma <sup>1</sup> .....	1
Whooping cough:	
Alabama.....	97
Arkansas.....	80
District of Columbia.....	43
Idaho.....	6
Illinois.....	1,101

January, 1928—Continued		January, 1928—Continued	
Whooping cough—Continued.	Cases	Whooping cough—Continued.	Cases
Mississippi.....	1,401	Oregon.....	20
Missouri.....	208	Pennsylvania.....	1,144
Montana.....	31	Rhode Island.....	19
North Carolina.....	544	Tennessee.....	135
Ohio.....	702	Washington.....	41
Oklahoma <sup>1</sup> .....	22	Wyoming.....	76

### GENERAL CURRENT SUMMARY AND WEEKLY REPORTS FROM CITIES

The 99 cities reporting cases used in the following table are situated in all parts of the country and have an estimated aggregate population of more than 31,100,000. The estimated population of the 93 cities reporting deaths is more than 30,450,000. The estimated expectancy is based on the experience of the last nine years, excluding epidemics.

*Weeks ended February 18, 1928, and February 19, 1927*

	1928	1927	Estimated expectancy
<i>Cases reported</i>			
Diphtheria:			
41 States.....	1,945	2,088	
99 cities.....	1,052	1,203	1,000
Measles:			
40 States.....	16,119	14,081	
99 cities.....	5,394	4,721	
Poliomyelitis:			
41 States.....	30	16	
Scarlet fever:			
41 States.....	4,710	6,348	
99 cities.....	1,725	2,561	1,456
Smallpox:			
41 States.....	1,163	920	
99 cities.....	121	184	125
Typhoid fever:			
41 States.....	175	256	
99 cities.....	29	53	40
<i>Deaths reported</i>			
Influenza and pneumonia:			
93 cities.....	1,140	971	
Smallpox:			
93 cities.....	1	0	
Houston, Tex.....	1	0	

<sup>1</sup> Exclusive of Oklahoma City and Tulsa.

## City reports for week ended February 18, 1928

The "estimated expectancy" given for diphtheria, poliomyelitis, scarlet fever, smallpox, and typhoid fever is the result of an attempt to ascertain from previous occurrence the number of cases of the disease under consideration that may be expected to occur during a certain week in the absence of epidemics. It is based on reports to the Public Health Service during the past nine years. It is in most instances the median number of cases reported in the corresponding week of the preceding years. When the reports include several epidemics, or when for other reasons the median is unsatisfactory, the epidemic periods are excluded and the estimated expectancy is the mean number of cases reported for the week during non-epidemic years.

If reports have not been received for the full nine years, data are used for as many years as possible, but no year earlier than 1919 is included. In obtaining the estimated expectancy, the figures are smoothed when necessary to avoid abrupt deviations from the usual trend. For some of the diseases given in the table the available data were not sufficient to make it practicable to compute the estimated expectancy.

Division, State, and city	Population, July 1, 1925, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
NEW ENGLAND									
Maine:									
Portland	76,400	6	2	5	0	0	3	7	2
New Hampshire:									
Concord	122,546	0	0	1	0	0	0	0	0
Manchester	84,000	0	3	0	0	0	0	0	1
Vermont:									
Barre	110,008	2	0	0	0	0	0	0	0
Massachusetts:									
Boston	787,000	67	50	27	9	1	528	8	34
Fall River	131,000	4	4	2	4	2	0	0	0
Springfield	145,000	5	3	8	0	0	3	57	1
Worcester	193,000	11	5	2	0	0	9	81	5
Rhode Island:									
Pawtucket	71,000	4	1	1	0	0	1	21	3
Providence	275,000	2	10	6	0	0	20	6	5
Connecticut:									
Bridgport	(?)	4	8	13	2	1	0	0	2
Hartford	164,000	9	8	9	1	0	3	4	3
New Haven	182,000	10	2	1	0	1	154	26	6
MIDDLE ATLANTIC									
New York:									
Buffalo	544,000	16	14	16	5	1	556	54	19
New York	5,924,000	204	213	313	36	21	332	16	251
Rochester	321,000	13	10	14	1	0	3	8	5
Syracuse	185,000	29	4	1		0	93	3	3
New Jersey:									
Camden	131,000	4	5	4	1	1	5	5	6
Newark	459,000	49	15	30	3	0	211	31	10
Trenton	134,000	2	3	3	0	0	8	0	3
Pennsylvania:									
Philadelphia	2,008,000	90	78	66		7	144	115	77
Pittsburgh	637,000	24	21	32		7	62	96	27
Reading	114,000	7	3	1		0	2	2	0
EAST NORTH CENTRAL									
Ohio:									
Cincinnati	411,000	20	10	10	0	2	313	8	9
Cleveland	960,000	44	32	55	2	1	31	232	21
Columbus	285,000	4	4	2	3	3	13	13	2
Toledo	293,000	28	7	2	1	1	294	19	9
Indiana:									
Fort Wayne	99,900	1	3	2	0	0	0	0	0
Indianapolis	367,000	22	8	16	0	0	24	103	12
South Bend	81,700	1	1	1	0	0	0	0	3
Terre Haute	71,900	1	1	0	0	1	0	0	3
Illinois:									
Chicago	3,048,000	133	80	116	14	7	25	55	101
Springfield	64,700	11	1	1	0	0	0	21	1
Michigan:									
Detroit	1,290,000	47	62	43	2	1	391	53	34
Flint	136,000	10	5	0	0	0	1	221	8
Grand Rapids	166,000	0	3	0	0	1	8	15	0

<sup>1</sup> Estimated, July 1, 1925.

<sup>2</sup> No estimate made.



## City reports for week ended February 18, 1928—Continued

Division, State, and city	Population, July 1, 1926, estimated	Chick- en pox, cases re-ported	Diphtheria		Influenza		Meas- les, cases re-ported	Mumps, cases re-ported	Pneu- monia, deaths re-ported
			Cases, esti- mated expec- tancy	Cases re-ported	Cases re-ported	Deaths re-ported			
EAST NORTH CENTRAL— continued									
Wisconsin:									
Kenosha.....	52,700	28	2	0	0	0	2	6	1
Madison.....	47,600	6	0	0	0	0	0	4	2
Milwaukee.....	517,000	64	18	12	2	2	2	21	13
Racine.....	69,400	6	2	1	0	0	1	5	0
Superior.....	139,671	1	0	0	0	0	0	0	2
WEST NORTH CENTRAL									
Minnesota:									
Duluth.....	113,000		1						
Minneapolis.....	434,000	62	17	10	0	1	4	8	3
St. Paul.....	248,000	15	14	5	0	0	0	76	13
Iowa:									
Davenport.....	152,469	3	1	0	0		0	0	
Des Moines.....	146,000	0	3	0	0		0	0	
Sioux City.....	78,000	4	2	0	0		8	14	
Waterloo.....	36,900	0	0	1	0		1	8	
Missouri:									
Kansas City.....	375,000		7						
St. Joseph.....	78,400	1	2	0	0	0	0	6	4
St. Louis.....	830,000	22	47	34	1	0	102	20	
North Dakota:									
Fargo.....	126,463	10	0	0	0	1	0	6	2
Grand Forks.....	114,811	0	0	0	0		1	0	
South Dakota:									
Aberdeen.....	115,036	1	0	0	0		0	0	
Sioux Falls.....	130,127	0	0	0	0		0	0	
Nebraska:									
Lincoln.....	62,000	2	1	1	0	0	0	35	0
Omaha.....	216,000	6	4	3	0	0	1	9	6
Kansas:									
Topeka.....	56,500	17	1	3	0	0	0	6	0
Wichita.....	92,500	38	4	2	0	0	2	1	0
SOUTH ATLANTIC									
Delaware:									
Wilmington.....	124,000	4		1	0	0	0	5	4
Maryland:									
Baltimore.....	808,000	106	31	25	26	6	591	17	42
Cumberland.....	133,741	1	0	0	2	0	1	1	1
Frederick.....	112,035	0	1	0	0	0	0	0	0
District of Columbia:									
Washington.....	528,000	18	20	33	4	5	61	0	11
Virginia:									
Lynchburg.....	30,500	0	1	2	0	0	6	0	4
Norfolk.....	174,000	21	2	4	0	0	54	2	8
Richmond.....	180,000	3	4	0	0	1	121	3	4
Roanoke.....	61,900	3	1	2	0	1	1	1	1
West Virginia:									
Charleston.....	56,700	1	1	0	0	0	0	0	3
Wheeling.....	155,298	0	1	0	0	0	0	0	3
North Carolina:									
Raleigh.....	130,371	5	1	1	0	0	57	0	0
Wilmington.....	37,700	0	0	0	0	2	18	0	1
Winston-Salem.....	71,800	5	1	1	0	0	153	27	4
South Carolina:									
Charleston.....	74,100	9	0	0	99	1	6	0	7
Columbia.....	41,800	7	1	1	0	1	106	37	11
Greenville.....	127,311	0	1	0	0	0	38	9	2
Georgia:									
Atlanta.....	(?)	9	3	3	45	2	4	0	10
Brunswick.....	116,809	0	1	0	0	0	37	4	2
Savannah.....	94,900	1	0	1	7	0	27	0	4
Florida:									
Miami.....	169,754	20	2	4	2	0	0	1	1
St. Petersburg.....	126,847		0			0			0
Tampa.....	102,000	7	2	2	0	1	0	2	1

<sup>1</sup> Estimated, July 1, 1925.

## City reports for week ended February 18, 1928—Continued

Division, State, and city	Population, July 1, 1926, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
EAST SOUTH CENTRAL									
Kentucky:									
Covington.....	58,500	1	1	0	0	0	16	0	5
Lexington.....	47,500	2		0	0	0	5	5	2
Louisville.....	311,000	9	6	2	5	0	50	9	14
Tennessee:									
Memphis.....	177,000	16	3	2	0	2	167	26	7
Nashville.....	137,000	2	1	2	0	1	2	2	2
Alabama:									
Birmingham.....	211,000	5	3	3	9	4	33	8	8
Mobile.....	66,800	3	1	0	2	0	1	0	2
Montgomery.....	47,000	6	1	2	2		1	0	
WEST SOUTH CENTRAL									
Arkansas:									
Fort Smith.....	131,643	0	0	1	0		1	0	
Little Rock.....	75,900	2	0	1	2	0	251	0	4
Louisiana:									
New Orleans.....	419,000	2	12	11	12	9	2	0	19
Shreveport.....	59,500	3	1	0	0	0	142	0	2
Oklahoma:									
Oklahoma City.....	(?)	2	1	3	21	0	33	0	5
Tulsa.....	133,000	29	1	1	0		0	33	
Texas:									
Dallas.....	203,000		6	6	2	2	2		13
Fort Worth.....	159,000	22	2	0	0	1	3	6	5
Galveston.....	49,100	0	1	1	0	0	3	0	3
Houston.....	164,954	1	4	6	3	3	7	0	6
San Antonio.....	205,000	2	2	5	5	8	67	1	21
MOUNTAIN									
Montana:									
Billings.....	117,971	0	0	0	0	0	0	0	0
Great Falls.....	129,883	7	1	0	0	1	0	0	3
Helena.....	112,037	0	0	12	0	0	0	0	1
Missoula.....	112,668	2	0	0	0	0	0	0	0
Idaho:									
Boise.....	123,042	1	0	0	0	0	0	4	0
Colorado:									
Denver.....	285,000	62	12	2		7	9	64	12
Pueblo.....	43,900	2	2	6	0	0	1	0	2
New Mexico:									
Albuquerque.....	121,000	3	0	0	0	0	82	0	0
Utah:									
Salt Lake City.....	133,000	15	3	1	0	0	1	4	1
Nevada:									
Reno.....	112,665	0	0	0	0	0	0	0	0
PACIFIC									
Washington:									
Seattle.....	(?)	30	7	7	0		178	13	
Spokane.....	100,000	1	3	0	0		0	3	
Tacoma.....	106,000	5	2	0	0	0	18	27	1
Oregon:									
Portland.....	1282,383	25	8	1	3	0	13	4	5
California:									
Los Angeles.....	(?)	60	40	12	27	5	19	36	44
Sacramento.....	73,400	11	2	1	0	0	17	1	2
San Francisco.....	567,000	80	21	12	5	3	39	65	4

<sup>1</sup> Estimated, July 1, 1925.<sup>2</sup> No estimate made.

## City reports for week ended February 18, 1928—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuber- culosis, deaths re- ported	Typhoid fever			Whoop- ing cough, cases re- ported	Deaths, all causes
	Cases, esti- mated expect- ancy	Cases re- ported	Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		
NEW ENGLAND											
Maine:											
Portland	3	6	0	0	0	1	0	0	0	7	17
New Hampshire:											
Concord	0	0	0	0	0	0	0	0	0	0	9
Manchester	3	3	0	0	0	3	1	0	0	0	25
Vermont:											
Barre	0	1	0	0	0	0	0	0	0	1	2
Massachusetts:											
Boston	80	80	0	0	0	10	1	1	0	73	248
Fall River	3	15	0	0	0	1	1	0	0	2	42
Springfield	8	21	0	0	0	0	0	0	0	5	34
Worcester	10	5	0	0	0	2	0	0	0	15	53
Rhode Island:											
Pawtucket	1	3	0	0	0	0	0	0	0	0	15
Providence	10	42	0	0	0	1	0	0	1	6	69
Connecticut:											
Bridgeport	14	12	0	0	0	3	0	0	0	0	14
Hartford	6	7	0	0	0	1	0	0	0	9	31
New Haven	11	0	0	0	0	2	0	1	0	16	-----
MIDDLE ATLANTIC											
New York:											
Buffalo	25	36	0	0	0	10	1	1	0	37	154
New York	285	411	0	0	0	100	7	4	3	183	1,652
Rochester	13	6	0	0	0	4	0	0	0	3	86
Syracuse	15	29	0	0	0	2	1	0	0	23	38
New Jersey:											
Camden	7	4	0	0	0	3	1	0	0	1	27
Newark	29	49	0	0	0	12	1	0	0	45	126
Trenton	5	1	0	0	0	1	0	1	0	1	31
Pennsylvania:											
Philadelphia	97	93	0	0	0	38	2	1	0	70	602
Pittsburgh	39	26	0	0	0	13	1	0	0	17	192
Reading	3	23	0	0	0	0	0	0	0	5	15
EAST NORTH CENTRAL											
Ohio:											
Cincinnati	19	25	1	0	0	13	0	0	0	9	149
Cleveland	49	42	1	0	0	19	1	1	0	50	201
Columbus	11	17	1	1	0	3	0	0	0	2	83
Toledo	14	11	1	0	0	8	1	0	0	25	72
Indiana:											
Fort Wayne	6	6	0	0	0	0	0	1	0	1	26
Indianapolis	10	13	12	6	0	7	0	0	0	4	95
South Bend	3	1	0	0	0	0	0	1	0	3	-----
Terre Haute	3	2	0	2	0	0	0	0	0	0	21
Illinois:											
Chicago	145	129	2	4	0	43	3	2	1	146	801
Springfield	2	18	0	0	0	0	1	0	0	2	18
Michigan:											
Detroit	100	103	2	0	0	23	1	0	0	75	185
Flint	9	16	1	1	0	4	1	0	0	12	37
Grand Rapids	12	4	1	0	0	4	0	0	0	8	33
Wisconsin:											
Kenosha	2	7	0	4	0	0	0	0	0	2	5
Madison	5	2	0	0	0	0	0	0	0	0	9
Milwaukee	26	33	2	1	0	5	1	0	0	21	104
Racine	5	10	0	0	0	1	0	0	0	8	13
Superior	4	2	1	0	0	0	0	0	0	0	7
WEST NORTH CENTRAL											
Minnesota:											
Duluth	8	-----	0	-----	-----	-----	0	-----	-----	-----	-----
Minneapolis	59	23	5	3	0	4	0	1	0	2	75
St. Paul	36	12	6	0	0	1	1	0	0	10	82
Iowa:											
Davenport	2	5	2	3	-----	-----	0	0	-----	0	-----
Des Moines	5	20	1	10	-----	-----	0	0	-----	0	32
Sioux City	1	2	1	0	-----	-----	0	0	-----	0	-----
Waterloo	2	5	1	0	-----	-----	0	0	-----	0	-----

## City reports for week ended February 18, 1928—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuber- culosis, deaths re- ported	Typhoid fever			Whoop- ing cough, cases re- ported	Deaths, all causes
	Cases, esti- mated expect- ancy	Cases re- ported	Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		
WEST NORTH CENTRAL—continued											
Missouri:											
Kansas City.....	13		3				0				
St. Joseph.....	3	3	0	9	0	2	0	0	0	1	32
St. Louis.....	45	39	4	2	0	13	1	1	0	13	219
North Dakota:											
Fargo.....	2	2	1	0	0	1	0	0	0	3	11
Grand Forks.....	1	2	0	0			0	0		0	
South Dakota:											
Aberdeen.....	1	3	0	0			0	0		1	
Sioux Falls.....	3	4	1	0			0	0		0	3
Nebraska:											
Lincoln.....	3	1	0	4	0	0	0	0	0	14	12
Omaha.....	6	12	10	5	0	4	0	0	0	1	67
Kansas:											
Topeka.....	2	1	1	6	0	0	0	0	0	14	8
Wichita.....	4	2	1	26	0	3	1	0	0	0	38
SOUTH ATLANTIC											
Delaware:											
Wilmington.....	5	2	0	0	0	2	0	0	1	1	25
Maryland:											
Baltimore.....	46	25	0	0	0	14	2	0	1	44	280
Cumberland.....	1	1	0	0	0	0	0	0	0	0	9
Frederick.....	0	0	0	0	0	0	0	0	0	0	2
Dist. of Columbia:											
Washington.....	26	54	2	0	0	11	1	0	0	8	140
Virginia:											
Lynchburg.....	0	0	0	0	0	2	0	0	0	17	13
Norfolk.....	2	14	0	0	0	1	0	0	0	1	
Richmond.....	3	4	0	0	0	0	0	0	0	0	41
Roanoke.....	0	4	0	0	0	1	0	0	0	0	16
West Virginia:											
Charleston.....	1	5	1	7	0	0	0	0	0	0	13
Wheeling.....	1	4	0	0	0	0	0	0	0	0	23
North Carolina:											
Raleigh.....	0	0	1	0	0	0	0	0	0	2	13
Wilmington.....	1	0	0	0	0	1	1	0	0	0	9
Winston-Salem.....	0	1	4	0	0	0	0	0	0	0	20
South Carolina:											
Charleston.....	0	1	0	0	0	0	0	0	0	0	22
Columbia.....	0	1	0	0	0	3	0	0	0	2	40
Greenville.....	0	0	1	1	0	0	0	0	0	1	7
Georgia:											
Atlanta.....	4	10	7	1	0	3	0	0	0	0	66
Brunswick.....	0	0	0	0	0	0	0	0	0	0	9
Savannah.....	1	1	0	6	0	0	0	0	0	0	30
Florida:											
Miami.....	1	5		0	0	1	0	0	0	1	31
St. Petersburg.....	0		0		0	1	0		0		10
Tampa.....	0	3	1	0	0	2	1	4	0	3	37
EAST SOUTH CENTRAL											
Kentucky:											
Covington.....	1	2	0	3	0	1	1	0	0	0	33
Lexington.....		2		0	0	2		0	0	1	18
Louisville.....	6	24	1	0	0	5	1	1	0	5	96
Tennessee:											
Memphis.....	5	10	2	1	0	2	0	0	0	1	76
Nashville.....	5	0	1	0	0	4	0	1	1	0	58
Alabama:											
Birmingham.....	2	0	6	1	0	5	1	0	0	0	67
Mobile.....	0	2	0	0	0	0	0	1	0	0	15
Montgomery.....	1	0	0	0			1	0		1	
WEST SOUTH CENTRAL											
Arkansas:											
Fort Smith.....	1	1	1	1			0	1		1	
Little Rock.....	2	5	0	0	0	1	1	1	0	0	
Louisiana:											
New Orleans.....	7	4	1	0	0	20	2	1	0	2	198
Shreveport.....	0	3	1	0	0	1	0	0	0	3	31



## City reports for week ended February 18, 1928—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuber- culosis, deaths reported	Typhoid fever			Whoop- ing cough, cases re- ported	Deaths, all causes
	Cases, esti- mated expect- ancy	Cases re- ported	Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		
WEST SOUTH CENTRAL—continued											
Oklahoma:											
Oklahoma City	3	0	3	12	0	1	0	0	0	0	35
Tulsa	2	9	1	5			0	0		5	
Texas:											
Dallas	2	9	3	2	0	5	0	0	0		67
Fort Worth	1	8	3	3	0	0	0	0	0	0	42
Galveston	0	1	1	0	0	1	1	0	0	0	14
Houston	2	4	3	2	1	8	0	0	0	0	75
San Antonio	1	2	0	0	0	1	0	0	0	0	79
MOUNTAIN											
Montana:											
Billings	2	0	1	4	0	0	0	0	0	0	5
Great Falls	3	3	0	4	0	0	0	0	0	0	20
Helena	1	4	0	1	0	1	0	0	0	0	8
Missoula	0	0	0	0	0	0	0	0	0	0	4
Idaho:											
Boise	1	0	1	0	0	0	0	0	0	0	11
Colorado:											
Denver	15	13	2	0	0	10	0	0	0	1	161
Pueblo	2	14	0	1	0	0	1	0	0	2	12
New Mexico:											
Albuquerque	2	0	0	0	0	5	0	0	0	0	12
Utah:											
Salt Lake City	3	2	2	6	0	2	1	0	0	14	26
Nevada:											
Reno	1	3	0	3	0	0	0	0	0	0	5
PACIFIC											
Washington:											
Seattle	12	8	5	1			0	1		13	
Spokane	6	6	6	6			0	0		0	
Tacoma	2	2	3	0	0	0	0	1	0	4	29
Oregon:											
Portland	7	5	10	32	0	3	0	0	0	0	
California:											
Los Angeles	35	37	8	0	0	24	2	1	0	14	234
Sacramento	1	3	1	0	0	2	1	0	0	0	27
San Francisco	16	34	5	0	0	13	1	0	0	8	155

Division, State, and city	Meningococcus meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (infantile paralysis)			
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, estimated expectancy	Cases	Deaths	
<b>NEW ENGLAND</b>										
Massachusetts:										
Boston	1	0	0	0	0	0	0	2	0	
Worcester	1	0	0	0	0	0	0	0	0	
Connecticut:										
Bridgeport	0	0	1	1	0	0	0	0	0	
<b>MIDDLE ATLANTIC</b>										
New York:										
Buffalo	0	1	0	0	0	0	0	0	0	
New York City	11	9	3	3	0	0	0	1	0	
New Jersey:										
Newark	1	0	0	0	0	0	0	0	0	
Pennsylvania:										
Philadelphia	2	1	1	0	0	1	0	0	0	
Pittsburgh <sup>1</sup>	0	0	0	0	0	0	0	2	0	

<sup>1</sup> Rabies (human): 1 death at Pittsburgh, Pa., and 1 death at New Orleans, La.

## City reports for week ended February 18, 1928—Continued

Division, State, and city	Meningo- coccus meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (infan- tile paralysis)		
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, esti- mated expect- ancy	Cases	Deaths
<b>EAST NORTH CENTRAL</b>									
Ohio:									
Cincinnati.....	0	0	0	1	0	0	0	0	0
Cleveland.....	1	2	0	0	0	0	0	0	0
Toledo.....	2	1	0	0	0	0	0	0	0
Indiana:									
Indianapolis.....	0	2	0	0	0	0	0	0	0
Illinois:									
Chicago.....	6	2	1	0	0	0	1	1	0
Michigan:									
Detroit.....	0	1	0	1	0	0	1	0	0
Wisconsin:									
Milwaukee.....	1	0	0	0	0	0	1	0	0
<b>WEST NORTH CENTRAL</b>									
Missouri:									
St. Louis.....	3	0	0	0	0	0	0	0	0
North Dakota:									
Fargo.....	0	0	4	1	0	0	0	0	0
<b>SOUTH ATLANTIC</b>									
Maryland:									
Baltimore.....	1	0	1	0	0	0	0	0	0
Virginia:									
Richmond.....	0	0	0	0	0	1	0	1	0
South Carolina: <sup>2</sup>									
Columbia.....	0	0	0	0	0	1	0	0	0
Georgia:									
Atlanta.....	1	0	0	0	0	2	0	0	0
Florida:									
Miami.....	0	0	0	0	1	0	0	0	0
Tampa <sup>3</sup> .....	0	1	0	0	0	0	0	0	0
<b>EAST SOUTH CENTRAL</b>									
Tennessee:									
Memphis.....	0	0	0	0	1	1	0	0	0
Nashville.....	0	0	1	0	0	0	0	0	0
Alabama:									
Mobile.....	0	0	0	0	1	0	0	0	0
<b>WEST SOUTH CENTRAL</b>									
Arkansas:									
Little Rock.....	0	0	0	0	0	2	0	0	0
Louisiana:									
New Orleans <sup>1</sup> .....	0	0	0	0	1	2	0	0	0
Shreveport.....	0	0	0	0	0	1	0	0	0
Oklahoma:									
Tulsa.....	1	0	0	0	0	0	0	0	0
Texas:									
Fort Worth.....	0	0	0	0	0	1	0	0	0
Houston.....	1	1	0	0	0	0	0	0	0
<b>MOUNTAIN</b>									
Montana:									
Missoula.....	1	0	0	0	0	0	0	0	0
Colorado:									
Denver.....	3	2	0	0	0	0	0	0	0
Utah:									
Salt Lake City.....	0	0	0	0	0	0	0	1	0
Nevada:									
Reno.....	2	0	0	0	0	0	0	0	0
<b>PACIFIC</b>									
Washington:									
Seattle.....	3	-----	0	-----	0	-----	0	0	-----
California:									
Los Angeles.....	1	0	0	0	0	0	0	1	0
San Francisco.....	2	1	0	0	0	0	0	0	0

<sup>1</sup> Rabies (human): 1 death at Pittsburgh, Pa., and 1 death at New Orleans, La.<sup>2</sup> Dengue: 2 cases at Charleston, S. C.<sup>3</sup> Typhus fever: 1 case at Tampa, Fla.

The following table gives the rates per 100,000 population for 101 cities for the five-week period ended February 18, 1928, compared with those for a like period ended February 19, 1927. The population figures used in computing the rates are approximate estimates as of July 1, 1927 and 1928, respectively, authoritative figures for many of the cities not being available. The 101 cities reporting cases had estimated aggregate populations of approximately 31,050,000 in 1927 and 31,657,000 in 1928. The 95 cities reporting deaths had nearly 30,370,000 estimated population in 1927 and nearly 30,961,000 in 1928. The number of cities included in each group and the estimated aggregate populations are shown in a separate table below.

*Summary of weekly reports from cities, January 15 to February 18, 1928—Annual rates per 100,000 population compared with rates for the corresponding period of 1927*<sup>1</sup>

## DIPHTHERIA CASE RATES

	Week ended—									
	Jan. 22, 1927	Jan. 21, 1928	Jan. 20, 1927	Jan. 28, 1928	Feb. 5, 1927	Feb. 4, 1928	Feb. 12, 1927	Feb. 11, 1928	Feb. 19, 1927	Feb. 18, 1928
101 cities.....	175	193	177	<sup>2</sup> 193	194	190	177	<sup>2</sup> 168	208	<sup>4</sup> 177
New England.....	151	168	163	172	146	193	174	136	133	172
Middle Atlantic.....	191	252	194	251	229	278	188	<sup>2</sup> 235	277	234
East North Central.....	170	192	175	186	201	145	179	175	168	169
West North Central.....	146	138	127	131	123	113	154	99	164	<sup>4</sup> 139
South Atlantic.....	161	146	198	146	143	167	222	112	191	149
East South Central.....	152	165	161	<sup>2</sup> 157	127	55	61	55	86	55
West South Central.....	170	152	203	164	232	152	149	128	170	124
Mountain.....	117	168	197	124	188	106	152	44	161	186
Pacific.....	232	125	167	161	217	156	167	133	188	82

## MEASLES CASE RATES

101 cities.....	451	619	425	<sup>2</sup> 583	570	724	652	<sup>2</sup> 734	810	<sup>4</sup> 905
New England.....	549	1,248	323	1,078	379	1,598	339	1,614	181	1,657
Middle Atlantic.....	49	478	46	483	41	618	45	<sup>2</sup> 467	69	700
East North Central.....	545	326	536	368	695	359	786	440	1,009	531
West North Central.....	277	259	297	138	453	222	683	216	564	<sup>4</sup> 284
South Atlantic.....	301	1,675	256	1,533	536	1,822	359	1,959	792	2,246
East South Central.....	203	1,387	188	<sup>2</sup> 1,621	299	1,192	451	1,132	467	1,347
West South Central.....	447	569	376	500	562	916	451	1,304	562	1,899
Mountain.....	5,074	97	4,447	88	7,217	115	7,845	186	9,665	97
Pacific.....	1,342	531	1,504	434	1,538	708	2,220	718	2,774	692

## SCARLET FEVER CASE RATES

101 cities.....	384	269	386	<sup>2</sup> 278	403	270	390	<sup>2</sup> 297	438	<sup>4</sup> 290
New England.....	537	508	539	372	509	359	537	432	470	441
Middle Atlantic.....	368	288	378	286	433	295	423	<sup>2</sup> 432	581	330
East North Central.....	336	286	347	301	324	289	323	310	322	280
West North Central.....	517	224	487	273	521	247	499	290	540	<sup>4</sup> 243
South Atlantic.....	280	207	253	200	245	207	238	231	249	228
East South Central.....	335	190	319	<sup>2</sup> 116	243	130	223	135	243	190
West South Central.....	194	83	112	128	124	132	74	100	66	116
Mountain.....	1,345	295	1,605	301	1,615	380	1,246	540	1,246	345
Pacific.....	319	240	326	296	436	217	389	192	340	220

<sup>1</sup> The figures given in this table are rates per 100,000 population annual basis and not the number of cases reported. Populations used are estimated as of July 1, 1927 and 1928, respectively.

<sup>2</sup> Louisville, Ky., not included.

<sup>3</sup> Buffalo, N. Y., not included.

<sup>4</sup> Duluth, Minn., and Kansas City, Mo., not included.

Summary of weekly reports from cities, January 15 to February 18, 1928—Annual rates per 100,000 population compared with rates for the corresponding period of 1927—Continued.

## SMALLPOX CASE RATES

	Week ended—									
	Jan. 22, 1927	Jan. 21, 1928	Jan. 20, 1927	Jan. 28, 1928	Feb. 5, 1927	Feb. 4, 1928	Feb. 12, 1927	Feb. 11, 1928	Feb. 19, 1927	Feb. 18, 1928
101 cities.....	20	22	20	<sup>1</sup> 23	25	21	26	<sup>1</sup> 22	33	<sup>1</sup> 20
New England.....	0	0	0	0	0	0	0	0	0	0
Middle Atlantic.....	1	0	0	0	0	0	0	<sup>1</sup> 1	0	0
East North Central.....	17	9	17	12	22	9	15	14	28	12
West North Central.....	59	121	79	121	53	117	71	109	81	<sup>1</sup> 123
South Atlantic.....	34	14	60	14	43	18	63	21	60	26
East South Central.....	25	55	86	<sup>1</sup> 29	101	29	81	15	132	25
West South Central.....	62	4	41	20	79	12	66	16	62	20
Mountain.....	0	106	9	133	9	115	18	44	27	168
Pacific.....	63	64	71	59	63	59	76	69	94	18

## TYPHOID FEVER CASE RATES

	7	6	7	<sup>1</sup> 8	7	7	7	<sup>1</sup> 7	9	<sup>1</sup> 5
101 cities.....	7	6	7	<sup>1</sup> 8	7	7	7	<sup>1</sup> 7	9	<sup>1</sup> 5
New England.....	2	9	5	21	9	14	5	9	2	5
Middle Atlantic.....	5	3	4	5	9	5	5	<sup>1</sup> 6	10	3
East North Central.....	6	6	2	5	5	3	3	6	4	3
West North Central.....	4	2	8	8	4	2	6	6	10	<sup>1</sup> 5
South Atlantic.....	7	5	18	7	5	5	18	9	23	7
East South Central.....	10	20	35	<sup>1</sup> 29	5	15	10	5	30	15
West South Central.....	4	12	0	40	17	40	12	40	8	12
Mountain.....	27	9	18	0	0	9	0	0	0	0
Pacific.....	21	8	21	0	8	10	18	0	3	8

## INFLUENZA DEATH RATES

	21	24	25	<sup>1</sup> 19	19	19	24	<sup>1</sup> 17	23	<sup>1</sup> 22
95 cities.....	21	24	25	<sup>1</sup> 19	19	19	24	<sup>1</sup> 17	23	<sup>1</sup> 22
New England.....	5	18	9	7	5	9	2	7	9	11
Middle Atlantic.....	20	19	22	16	21	14	28	<sup>1</sup> 14	25	18
East North Central.....	25	17	21	12	9	13	22	10	19	12
West North Central.....	4	18	4	10	12	10	14	4	23	<sup>1</sup> 5
South Atlantic.....	20	26	49	11	27	23	23	30	31	35
East South Central.....	16	105	32	<sup>1</sup> 101	38	68	37	42	43	37
West South Central.....	42	66	72	78	64	45	38	57	38	90
Mountain.....	54	71	72	80	45	53	72	53	27	71
Pacific.....	31	17	14	20	7	34	21	20	17	27

## PNEUMONIA DEATH RATES

	183	179	158	<sup>1</sup> 159	168	150	147	<sup>1</sup> 167	146	<sup>1</sup> 174
95 cities.....	183	179	158	<sup>1</sup> 159	168	150	147	<sup>1</sup> 167	146	<sup>1</sup> 174
New England.....	207	156	158	126	188	126	165	149	102	170
Middle Atlantic.....	197	193	174	183	197	129	173	<sup>1</sup> 200	148	195
East North Central.....	138	137	132	121	121	129	128	114	121	137
West North Central.....	116	137	126	98	135	49	95	106	91	<sup>1</sup> 71
South Atlantic.....	278	231	189	210	222	198	168	224	234	216
East South Central.....	255	251	213	<sup>1</sup> 171	207	131	117	235	175	204
West South Central.....	195	308	200	267	149	209	144	201	204	279
Mountain.....	215	186	170	177	143	203	143	150	188	168
Pacific.....	134	142	107	145	121	128	114	182	176	172

<sup>1</sup> Louisville, Ky., not included.

<sup>2</sup> Buffalo, N. Y., not included.

<sup>3</sup> Duluth, Minn., and Kansas City, Mo., not included.



*Number of cities included in summary of weekly reports, and aggregate population of cities in each group, approximated as of July 1, 1927 and 1928, respectively*

Group of cities	Number of cities reporting cases	Number of cities reporting deaths	Aggregate population of cities reporting cases		Aggregate population of cities reporting deaths	
			1927	1928	1927	1928
Total.....	101	95	31,050,300	31,657,000	30,369,500	30,960,700
New England.....	12	12	2,242,700	2,274,400	2,242,700	2,274,400
Middle Atlantic.....	10	10	10,594,700	10,732,400	10,594,700	10,732,400
East North Central.....	16	16	7,820,700	7,991,400	7,820,700	7,991,400
West North Central.....	12	10	2,634,500	2,683,500	2,518,500	2,566,400
South Atlantic.....	21	21	2,890,700	2,981,900	2,890,700	2,981,900
East South Central.....	7	6	1,028,300	1,048,300	980,700	1,000,100
West South Central.....	8	7	1,260,700	1,307,600	1,227,800	1,274,100
Mountain.....	9	9	581,600	591,100	581,600	591,100
Pacific.....	6	4	1,996,400	2,046,400	1,512,100	1,548,900

## FOREIGN AND INSULAR

### THE FAR EAST

*Report for the week ended February 4, 1928.*—The following report for the week ended February 4, 1928, was transmitted by the eastern bureau of the health section of the secretariat of the League of Nations located at Singapore to the headquarters at Geneva:

Plague, cholera, or smallpox was reported present in the following ports:

#### PLAGUE

*Egypt.*—Suez.  
*Aden Protectorate.*—Aden.  
*India.*—Bombay, Rangoon.  
*Ceylon.*—Colombo.  
*Dutch East Indies.*—Makassar.

#### CHOLERA

*India.*—Bassein, Calcutta, Rangoon.  
*Siam.*—Bangkok.

#### SMALLPOX

*Ceylon.*—Colombo.  
*India.*—Bombay, Calcutta, Madras, Moulmein, Negapatam, Rangoon, Tuticorin, Vizagapatam.  
*French India.*—Pondicherry.  
*Dutch East Indies.*—Banjermasin, Belawan-Deli Pontianak.  
*Straits Settlements.*—Singapore.  
*China.*—Hong Kong, Shanghai.  
*Kwantung.*—Dairen.  
*Manchuria.*—Mukden.

Returns for the week ended February 4 were not received from Balikpapan, Dutch East Indies, Canton, China, or Vladivostok, Union of Socialist Soviet Republics.

### ANGOLA

*Epidemic cerebrospinal meningitis in the plateau region—Suspect plague at Benguela.*—Under date of January 11, 1928, epidemic cerebrospinal meningitis was reported present in the high plateau region of Angola. Under the same date two suspect cases of plague were reported at Benguela.

### ARABIA

*Aden—Plague—Increased prevalence—January 31, 1928.*—Information received from Aden, Arabia, under date of January 31, 1928, shows increased prevalence of plague at that port, with 77 cases and 33 deaths reported to that date. The history of the outbreak indicates that plague was discovered January 9, and that 27 cases with 13 deaths were reported from that date to January 11, 1928. The disease was stated at that date to be confined to a section of the town inhabited by coal coolies. This population group was removed and isolated in quarantine. On January 24, spread of infection outside the original focus and contacts was noted and plague was stated to be present in epidemic form.

## BELGIAN CONGO

*Boma—Matadi—Yellow fever—December 24, 1927, to January 19, 1928.*—Information from the Government of Belgium, dated February 4, 1928, shows 1 fatal case of yellow fever at Boma, Belgian Congo, in a sailor from the steamship *Manpoko*, and 31 cases with 18 deaths at Matadi, Belgian Congo, from December 24, 1927, to January 19, 1928. Of the cases at Matadi, 16 with 8 deaths were in Europeans.

## CANADA

*Provinces—Communicable diseases—Week ended February 18, 1928.*—The Canadian Department of Health reports cases of certain communicable diseases from six Provinces of Canada for the week ended February 18, 1928, as follows:

Disease	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Total
Influenza.....	18			4			22
Lethargic encephalitis.....					1		1
Smallpox.....				40		7	47
Typhoid fever.....			29	5		1	35

*Quebec Province—Communicable diseases—Week ended February 18, 1928.*—The Bureau of Health reports cases of certain communicable diseases for the week ended February 18, 1928, as follows:

Disease	Cases	Disease	Cases
Chicken pox.....	40	Scarlet fever.....	128
Diphtheria.....	48	Smallpox.....	11
German measles.....	3	Tuberculosis.....	44
Influenza.....	7	Typhoid fever.....	31
Measles.....	251	Whooping cough.....	14

*Quebec Province—Vital statistics—December, 1927.*—Births and deaths in the Province of Quebec for the month of December, 1927, were reported as follows:

Estimated population.....	2,604,000	Deaths from—Continued.	
Births.....	6,071	Heart disease.....	339
Birth rate per 1,000 population.....	28.0	Influenza.....	68
Deaths.....	2,724	Measles.....	16
Death rate per 1,000 population.....	12.6	Pneumonia.....	245
Deaths under 1 year.....	698	Polio-myelitis.....	1
Infant mortality rate.....	115	Scarlet fever.....	16
Deaths from—		Smallpox.....	2
Accidents.....	61	Syphilis.....	2
Cancer.....	118	Tuberculosis (pulmonary).....	168
Cerebrospinal meningitis.....	5	Tuberculosis (other forms).....	35
Diabetes.....	19	Typhoid fever.....	16
Diarrhea.....	123	Whooping cough.....	37
Diphtheria.....	51		

## ECUADOR

*Guayaquil—Plague—Infected rats—January, 1928.*—During the month of January, 1928, four cases of plague with four deaths were reported at Guayaquil, Ecuador. During the same period, 23,812 rats were reported examined at Guayaquil and 23 rats found plague infected.

*Smallpox.*—During the two weeks ended January 15, 1928, two cases of smallpox were reported at Guayaquil.

## EGYPT

*Plague—Province of Assiout—Suez—January 31–February 1, 1928.*—Plague has been reported in Egypt as follows: Assiout Province, one fatal case, bubonic; Suez, two fatal cases, one bubonic, one septicemic.

## ESTONIA

*Communicable diseases—December, 1927.*—During the month of December, 1927, communicable diseases were reported in the Republic of Estonia as follows:

Disease	Cases	Disease	Cases
Diphtheria.....	50	Tuberculosis.....	108
Measles.....	46	Typhoid fever.....	23
Scarlet fever.....	493		

Population, officially estimated, 1,114,630.

## MADAGASCAR

*Plague—December 1–15, 1927.*—During the period December 1 to 15, 1928, 145 cases of plague with 134 deaths were reported in the Island of Madagascar. The occurrence was distributed according to Provinces as follows: Antsirabe, cases and deaths, 34; Itasy, cases 25, deaths, 24; Moramanga, cases 17, deaths 14; Tananarive, exclusive of the town of Tananarive, cases 55, deaths 49; Tananarive Town, cases 14, deaths 13. The distribution according to type was: Bubonic, cases 91; pneumonic, 19; septicemic, 35. Mortality according to type was: Bubonic, 80 deaths; pneumonic, 19; septicemic, 35.

## MEXICO

*Epidemic smallpox—Typhoid fever—State of Jalisco, Mexico—February, 1928.*—According to press reports dated February 11, 1928, smallpox in epidemic form was reported present in the Los Altos region of the State of Jalisco, Mexico, the principal urban locality affected being the town of Atotonilco el Alto. Some prevalence of typhoid fever was also reported. The epidemic outbreak was explained as being induced by concentration of population in the region affected, due to local disturbances in the Los Altos district.



## POLAND

*Communicable diseases—1927.*—The following table gives a summary of the number of the principal communicable diseases reported in Poland for the year 1927, with the deaths from these diseases and the case and death rates per 100,000 population.

Disease	Cases	Deaths	Rates per 100,000	
			Cases	Deaths
Diphtheria	9,685	838	32.2	2.7
Measles	41,888	901	139.6	3
Scarlet fever	36,379	3,224	121.1	10.7
Trachoma	13,029		43.7	
Typhoid fever	19,129	1,477	63.7	4.9
Typhus fever	2,934	266	9.7	.8
Whooping cough	9,478	719	31.5	2.3

## VIRGIN ISLANDS

*Communicable diseases—January, 1928.*—During the month of January, 1928, communicable diseases were reported in the Virgin Islands of the United States as follows:

Island and disease	Cases	Remarks
St. Thomas and St. John:		
Chancroid	1	
Dengue	4	
Erysipelas	1	St. John.
Gonorrhea	3	
Malaria	2	Benign tertian.
Syphilis	1	Secondary.
Tetanus	2	
Tuberculosis	1	Chronic pulmonary.
Whooping cough	2	
St. Croix:		
Diphtheria	1	
Gonorrhea	1	
Syphilis	9	Secondary.
Uncinariasis	4	Necator americanus.

## YUGOSLAVIA

*Communicable diseases—January, 1928.*—During the month of January, 1928, communicable diseases were reported in Yugoslavia as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Anthrax	17	4	Poliomyelitis		1
Cerebrospinal meningitis	11	7	Rabies	1	1
Diphtheria	235	59	Scarlet fever	1,548	216
Dysentery	23	1	Tetanus	10	2
Leprosy	1		Typhoid fever	262	33
Measles	2,141	28	Typhus fever	7	3



Place	July, 1927	August, 1927	September, 1927	October, 1927	November, 1927				December, 1927				January, 1928			
					November, 1927				December, 1927				January, 1928			
					1-10	11-20	21-30	1-10	11-20	21-31	1-10	11-20	1-10	11-20	1-10	11-20
India (French):																
Chandernagor.....	1	1	1													
Karikal.....	1	1	1													
Pondicherry.....	56	18	12	1												
Indo-China: Saigon.....	45	12	15	1												
Iraq <sup>1</sup> .....	37	12	15	1												
Japan: Yokohama.....	24	11	15	1												
Philippine Islands: Manila.....																
Siam.....	1	1	1													
Bangkok.....	81	77	40	18	43	30	19	20	18	32	24	13	40			
Straits Settlements: Singapore.....	59	53	24	11	25	26	11	19	13	21	18	21	5	35		
On vessel:	6	2	3	5	1	3	1	1	1	1	2	3	7	9	11	28
S. S. Adrastus: At Yokohama, Japan.....	1	1	1	1												
S. S. Tabaristan: At Basra, Iraq.....	1	1	1	1												
Indo-China (French):																
Annam.....	911	1,628	640	226	13	75		38	16	2				79	95	
Cambodia.....	87	89	75	180	56	1	1	28	21	12				39	30	9
Cochin-China.....	257	68	144	178	21	27		52	17	38				58	46	119
Laos.....	20	190	36	67	10											
Tonkin.....	1,063	180	24	1												
Kwangchow-wan.....		1	15	1												

<sup>1</sup> From July 19 to Dec. 26, 1927, 1,479 cases of cholera were reported in Iraq, with 1,063 deaths, as follows: Amarah Liwa, 261 cases, 205 deaths; Baghdad Liwa, 80 cases, 60 deaths; Basra Liwa, 421 cases, 330 deaths; Diwanah Liwa, 122 cases, 72 deaths; Diyala Liwa, 1 case, 1 death; Dulaim Liwa, 100 cases, 69 deaths; Hillah Liwa, 105 cases, 71 deaths; Kerbala Liwa, 79 cases, 60 deaths; Kut Liwa, 66 cases, 44 deaths; Muntadq Liwa, 244 cases, 151 deaths.







## CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

## PLAGUE—Continued

[C indicates cases; D, Deaths; P, present]

Place	July 31- Aug. 27, 1927	Aug. 28- Sept. 24, 1927	Sept. 25- Oct. 22, 1927	Week ended—										January, 1928				February, 1928			
				Oct. 29, 1927	November, 1927					December, 1927					7	14	21	28	4	11	18
					5	12	19	26	3	10	17	24	31								
Senegal—Continued.																					
Rufisque.....	104	44	16																		
Thies.....	52	38	12																		
Tiessouane.....	7		9	1																	
Tiessouane.....	3		7																		
Tiessouane.....	43																				
Tiessouane.....	29																				
Siam.....				13																	
Bangkok.....				9																	
Straits Settlements: Singapore.....				2																	
Turkey: Constantinople.....				9																	
Union of South Africa:				2																	
Cape Providence.....																					
Orange Free State.....																					
U. S. S. R.:																					
Chita district.....																					
Northern Caucasus.....																					
On vessel:																					
At La Plata, from Rosario, Argentina.....																					
S. S. Agios Gerasimos at Vigo, Spain.....																					

Beirut, Syria, 1 case, Dec. 1-10.

**CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued**

### PLAGUE—Continued

[C indicates cases; D, deaths; P, present]

Place	July	August	September	October	November	December	January
Algeria: Algiers.....	C	13	61	21	2	16	.....
British East Africa: Kenya.....	C	5	7	3	4	5	25
Ecuador: Guayaquil.....	D	.....	.....	.....	.....	.....	22
Indo-China (French).....	C	46	98	14	3	3	139
Madagascar.....	C	43	89	164	165	180	108
Ambohitra Province.....	D	6	1	.....	6	1	.....
Antsirabe Province.....	D	6	1	.....	1	10	20
Antsirabe Province.....	D	34	5	19	18	72	14
Iassy Province.....	D	14	34	4	19	17	3
Iassy Province.....	D	11	21	16	26	62	7
Iassy Province.....	D	14	20	15	25	54	1
Madagascar—Continued.							
Moromanga Province.....	C	.....	.....	.....	.....	.....	46
Tananarive Province.....	D	.....	.....	.....	.....	.....	41
Mauritius.....	C	.....	.....	.....	.....	.....	170
Nigeria.....	C	.....	.....	.....	.....	.....	153
Peru.....	D	.....	.....	.....	.....	.....	1
Callao.....	D	.....	.....	.....	.....	.....	.....
Lima.....	D	.....	.....	.....	.....	.....	.....

## SMALLPOX

(C indicates cases; D, deaths; P, present)

[illegible]

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

[C indicates cases; D, deaths; P, present]

[illegible]



[illegible]

**CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued**

SMALLPOX—Continued

(C indicates cases; D, deaths; P, present)

[illegible]

Place	July, 1927	August, 1927	Septem-ber, 1927	October, 1927	November, 1927			December, 1927			January, 1928				
					1-10	11-20	21-30	1-10	11-20	21-31	1-10	11-20	21-31	1-10	21-31
San Luis Potosí.....	4	1	1	2											
Torreón.....	D														
Palestine: Jerusalem.....	D														
Paraguay.....	D	2						1							
Persia: Teheran.....	D	2													
Poland.....	D	7	2						1	5					
Portugal: Lisbon.....	D	2	1												
.....	4														
.....			3	8	1	2	1	3	3	4	1	2	4	5	2
Oporto.....	D														
.....	D														
Siam.....	D	34	51	27	6		1	8	1	1	2	5	8	8	
.....	D	9	10	15											
Bangkok.....	D	5	3					1							
.....	D	1	1												
Spain: Malaga.....	D														
Seville.....	D														
Valencia.....	D														
Straits Settlements: Singapore.....	D														
Switzerland.....	D														
Tunisia: Tunis.....	D														
Union of South Africa: Cape Province.....	D														
Orange Free State.....	D	P	P	P				P	P	P					
Transvaal.....	D														
Venezuela: Maracaibo.....	D	1	2	P											
.....															
Algeria.....	C	376	459	382	682										
Oax.....	C	14	10	16	11										
Indo-China.....	C	19	3	21	25	13	3	22	10	4					18
Syria: Aleppo.....	C														
Beirut.....	C														
Damascus.....	C		3	5	22		13		4	6		1	1	1	2

# CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

## SMALLPOX—Continued

[C indicates cases; D, deaths; P, present]

Place	July	August	September	October	November	December	January
Angola.....	42	2	5	73	2	2	6
Congo.....			5	77			
Cuana-Norte.....			1				
Cuana-Sul.....				2			
Loanda.....			1				
Zaire.....			3	4	1		
Brazil: Porto Alegre.....	5	3	3	4	1		
British East Africa: Zanzibar.....				2			
Choen.....	10	2		2	2		
Enador, Guayaquil.....	6				1		
France.....	23	6	8	7	4	14	
Gold Coast.....	1		5	4			
Greece.....		3	4	4			1
Latvia.....		73	55	2			6
Mexico.....	93	73					
Morocco.....		53	76	51		401	
Nigeria.....	492	91	237	223	93		
Persia.....	83	20	70	51	30		
Spain: Madrid.....				2	2		
U. S. S. R.: Railways, etc. Other territories in Europe. Transcaucasia, Siberia, and Central Asia.....	11	6	9				
Ukraine.....	140	111	199				
	36	29	15				
	16	4					

# TYPHUS FEVER

[C indicates cases; D, deaths; P, present]

[illegible]



Place	1927												November, 1927				December, 1927				January, 1928	
	July		August		September		October		1-10		11-20		21-30		1-10		11-20		21-31		1-10	
	July	August	August	September	September	October	October	1-10	11-20	21-30	1-10	11-20	21-30	1-10	11-20	21-31	1-10	11-20	21-31	1-10	11-20	21-31
China: Manchuria—Harbin.....	3	2	2	12	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Tientsin.....	1	2	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Egypt.....	24	2	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Port Said.....	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ireland (Irish Free State):																						
Cork County.....	1																					
Donegal County, Letterkenny.....				4																		
Mexico: Guadalajara.....																						
Mexico City, including municipalities in Federal District.....	16	17	19	18	9	6	2	11	7	6	4	1	1	1	1	1	1	1	1	1	1	1
Morocco.....																						
Palestine: Haifa.....		4	2																			
Herzlia.....																						
Jaffa.....		2	1																			
Nazareth.....	1	2	1																			
Safed.....	1	1	1																			
Tel-Aviv.....	90	50	35	19	12	6	11	13	28	17	35	26	33	68	59	101	33	68	59	101	33	68
Poland.....	10	6	6	3	2	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Portugal: Oporto.....	27	36	16	17	9	2	6	8	8	13	32	17	19	10	2	1	1	1	1	1	1	1
Rumania.....	4	1	2																			
Syria: Aleppo.....		14	1																			
Tunisia.....	29		3																			
Union of South Africa:																						
Cape Province.....	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Natal.....	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Orange Free State.....	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Transvaal.....	18	1	5																			
Algeria.....	C	67	33	10	12																	
D	13				2																	
Algeria.....	C	2	2	6	2																	
D	2				7																	
Bulgaria.....	C	12	24	7	2																	
D	1			1	1																	
Morocco.....	C	148	76	7	11	5	14	7														
D																						



Place	July					August					September					October				
	15					22					29					6				
Liberia: Monrovia																				
Nigeria																				
Senegal																				
Dakar																				
Geoul																				
Gores Island																				
Kebemer																				
Kello																				
Keur Samba Kane																				
Keur Madlop																				
Khombole																				
Louga																				
Mekhe																				
M'Dande																				
Ouakham																				
Pout																				
Rufisque																				
Saint Louis																				
Sébikotane																				
Thies																				
Tiaroye																				
Tivaouane																				
Togoland																				
Gold Coast																				

X